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February 27, 2007

By Hand Delivery

Mark W. Lucas
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Arizona Department of Environmental Quality
1110 W. Washington Street, #4415A-3
Phoenix, AZ 85007

Re: Fourth Quarter Status Report for 2006 LUST File #0393.02-.10, .15-.17

*Facility ID #0-002227* 

Dear Mr. Lucas:

Honeywell is submitting this *Fourth Quarter Status Report for 2006* in accordance with requirements in the Arizona Department of Environmental Quality's (ADEQ) *Corrective Action Plan Final Approval* letter dated October 7, 2005, and CAP modification approval letters dated December 20, 2005, March 7, 2006, and September 28, 2006.

If you should have any questions or require discussion, please contact me at 973-455-4279 or Jeff Mieth at 480-377-6265. For your convenience, my e-mail address is <a href="mailto:troy.j.meyer@honeywell.com">troy.j.meyer@honeywell.com</a> and Jeff's is <a href="mailto:jeffrey.mieth@ch2m.com">jeffrey.mieth@ch2m.com</a>.

Sincerely,

Troy J. Kennedy

Honeywell - Health, Safety, Environment and Remediation

Remediation Portfolio Director

Mr. Lucas February 27, 2007 Page 2 of 2

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### ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY Tank Programs Division Underground Storage Tank (UST) Program

ADEQ use only

# DOCUMENT SUBMITTAL FORM

[ use as <u>COVER SHEET</u> when submitting the document	is listed below ]				
UST FACILITY INFORMATION:					
Honeywell 34th Street Facility	0-002227				
Facility Name	Facility ID				
111 South 34th Street	0393.0210, .1517				
Street Address	LUST Number(s)				
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City Zip Code	County				
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LUST, RELEASE OR CORRECTIVE ACTION DOCUMENT: (check all that apply; * indicates document requires signed certification statement)    * 14 day report (suspected release)					
"I hereby certify, under penalty of law, which this submittal and all attachmer complete. I am aware that there are penalties for submitting false information violations."  Signature of UST owner, operator or volunteer  Troy J. Kennedy Name of UST owner, operator or volunteer (printed)	nts are, to the best of my knowledge and belief, true, accurate, and				

# Fourth Quarter Status Report for 2006 Honeywell 34th Street Facility Facility ID No. 0-002227 LUST File Nos. 0393.02-.10, .15-.17

Volume 1 of 2

Prepared for

# Honeywell International Inc.

February 2007



Prepared by



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# **Acronyms and Abbreviations**

%LEL percent of lower explosive limit

μg/L micrograms per liter

ADEQ Arizona Department of Environmental Quality

BSVE bioenhanced soil-vapor extraction

BTEX total benzene, toluene, ethylbenzene, and xylenes

CAP Corrective Action Plan

CO<sub>2</sub> carbon dioxide

COP City of Phoenix

DSD Design Services Department (City of Phoenix)

Facility Honeywell 34th Street Facility

Honeywell International Inc.

LUST leaking understand storage tank

MCAQD Maricopa County Air Quality Department

MCL maximum contaminant level

MRL minimum reporting level

MTBE methyl tert-butyl ether

O<sub>2</sub> oxygen

OU Operable Unit

TCA 1,1,1-trichloroethane

TCE trichloroethylene

TI Tenant Improvement (Aviation Department)

TRPH total recoverable petroleum hydrocarbons

USEPA United States Environmental Protection Agency

UST underground storage tank

VOC volatile organic compound

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## 1.0 Introduction

## 1.1 Scope and Purpose

This quarterly status report summarizes ongoing contaminant characterization and remediation activities conducted during the fourth quarter 2006, for Leaking Underground Storage Tank (LUST) File Nos. 0393.02-.10, .15-.17, Facility ID No. 0-002227, Honeywell 34<sup>th</sup> Street Facility (Facility or Honeywell facility). In accordance with the Arizona Department of Environmental Quality's (ADEQ) letter to Honeywell International Inc. (Honeywell), dated November 17, 2006 (ADEQ, 2006a), Honeywell has added LUST File Nos. 0393.16 and 0393.17 to the scope of this status report and will continue to reference these file numbers on all future submittals related to the Corrective Action Plan (CAP) (CH2M HILL, 2004a-b) and contaminant remediation.

This report is being submitted pursuant to reporting requirements in the ADEQ letter, dated October 7, 2005 (ADEQ, 2005a), issuing final approval of Honeywell's CAP (CH2M HILL, 2004a-b) and in accordance with ADEQ's CAP modification approval letters dated December 20, 2005 (ADEQ, 2005b), March 7, 2006 (ADEQ, 2006b), and September 28, 2006 (ADEQ, 2006c).

## 1.2 Background

The Honeywell facility is located within Operable Unit (OU) 2 of the Motorola 52<sup>nd</sup> Street Superfund Site at 111 South 34<sup>th</sup> Street in Phoenix, Arizona. Figure 1-1 illustrates the Facility location and layout. The Honeywell facility has been used as a manufacturing and testing facility for the production of aircraft engines and auxiliary equipment since 1951.

The United States Environmental Protection Agency (USEPA) and ADEQ Superfund Programs Section are currently overseeing the characterization and remediation of soil and groundwater contaminated with chlorinated volatile organic compounds within the Superfund site. ADEQ has been delegated the lead for facility investigations within OU2, including the Honeywell facility. During the Superfund investigation, petroleum hydrocarbons were detected at the Honeywell facility, and a parallel investigation was initiated under the ADEQ Underground Storage Tank (UST) Corrective Action Section. Since that time, Honeywell has investigated the extent of contamination, initiated corrective actions to recover free product, and developed a CAP. The approved CAP (CH2M HILL, 2004a-b) recommends the following remedial actions:

- Remediate soil contamination in the vadose zone, the petroleum hydrocarbon smear zone, and the free-phase petroleum hydrocarbon pool with bioenhanced soil-vapor extraction (BSVE).
- Supplement BSVE remediation by selectively removing free product from existing groundwater monitoring wells.

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• Treat the remaining dissolved-phase groundwater contamination with monitored natural attenuation after aggressive source removal is complete. ADEQ is withholding approval of this remediation technology pending completion of free-product removal to the maximum extent practicable (ADEQ, 2005a).

## 1.3 Summary of Activities

This quarterly status report summarizes the activities conducted or completed as part of the UST corrective action from October 2006 through December 2006:

- Honeywell conducted the fourth quarter 2006 groundwater sampling event between December 7 and December 15, 2006.
- Honeywell conducted three monthly water-level measurements and two additional rounds of manual free-product-specific monitoring/recovery during the fourth quarter 2006. As described in Section 2.1, the free-product monitoring/recovery schedule is based on the measured free-product thicknesses in individual monitoring wells in accordance with the LUST Field Sampling Plan Groundwater Sampling, Free Product Monitoring and Recovery Plan (CH2M HILL, 2005a).
- Honeywell collected a free-product sample from monitoring well ASE-107A on November 2, 2006. The free-product sample was fingerprinted for fuel type and analyzed for volatile organic compounds (VOCs) using USEPA Method 8260B.
- Honeywell continued monthly monitoring of 13 Sky Harbor International Airport subsurface utility vaults for oxygen (O<sub>2</sub>), carbon dioxide (CO<sub>2</sub>), methane, and percent of lower explosive limit (%LEL).
- Honeywell continued helium gas tracer tests between October 2 and October 18, 2006, and between November 14 and November 28, 2006, to determine well dilution effects from ambient air during soil-gas sampling at selected monitoring wells.

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## 2.0 Site Characterization Activities

This section describes groundwater and free-product data collected as part of Honeywell's ongoing UST monitoring program. Because there were no additional monitoring wells installed or associated soil samples collected during the reporting period (October 1, 2006 to December 31, 2006), this section does not include a discussion of soil data. For a discussion of historical soil data, see the *First Quarter Status Report for 2006, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15* (CH2M HILL, 2006a). Groundwater data presented in this section were generated from samples collected during the fourth quarter groundwater sampling round conducted in December 2006, in accordance with the *LUST Field Sampling Plan – Groundwater Sampling, Free Product Monitoring and Recovery Plan* (CH2M HILL, 2005a).

Consistent with Honeywell's *Site Characterization Report Update – October* 2005 (CH2M HILL, 2005b), this section presents a discussion of dissolved-phase contaminant concentrations and distribution, along with associated plan view plots, of:

- Benzene.
- Methyl-tert-butyl-ether (MTBE).
- Naphthalene.
- Benzo(a)pyrene.
- Total benzene, toluene, ethylbenzene, and xylenes (BTEX).
- Total recoverable petroleum hydrocarbons (TRPH).
- Total VOCs.
- Total non-fuel VOCs.
- Total trichloroethylene (TCE).
- Total 1,1,1-trichloroethane (1,1,1-TCA).

This section also discusses free-product thickness measurements collected on December 6-7, 2006 and the historical maximum free-product thicknesses measured in Honeywell's UST monitoring wells since free product was first encountered in a monitoring well at the Facility in 1999. Furthermore, this section discusses the analytical results of a sample of free product collected from monitoring well ASE-107A on November 2, 2006. Data regarding Honeywell's free-product recovery efforts and recovered free-product volumes through fourth quarter 2006 are presented in Section 3.0.

## 2.1 Free Product

Historically, free product has been observed in 30 monitoring wells located on the Honeywell facility and Sky Harbor International Airport property. Honeywell monitors the thickness of free product in these and other monitoring wells near the free-product pool either monthly or biweekly. The monitoring schedule is based on the measured free-product thicknesses and is in accordance with the LUST Field Sampling Plan – Groundwater Sampling, Free Product Monitoring and Recovery Plan (CH2M HILL, 2005a). In general, any monitoring

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well with a free-product thickness less than 0.1 foot is measured monthly, and any monitoring well with a free-product thickness greater than 0.1 foot is measured biweekly. During the reporting period, monitoring wells ASE-67A and ASE-107A were measured approximately biweekly, as indicated in Table 2-1.

Free-product thicknesses are illustrated in this quarterly status report for measurements collected on December 4, 2006 (ASE-67A only) and December 6, 2006 (the last complete monitoring round of the reporting period), as well as the historical maximum thicknesses. Table 2-1 provides free-product thickness measurements collected during the reporting period for all monitoring wells where free product has been observed historically.

On December 6, 2006, Honeywell observed free product in eight monitoring wells located on its property and Sky Harbor International Airport property (including monitoring well ASE-67A measured on December 4, 2006), as shown on Figure 2-1. These monitoring wells previously contained free product at thicknesses equal to or greater than those measured in December 2006. The December 6, 2006 free-product thickness measurement of 0.02 foot in monitoring well ASE-91A was equal to its historical maximum thickness, observed in September 2006. On December 6, 2006, the maximum free-product thickness observed in any monitoring well was 0.41 foot in monitoring well ASE-107A (Figure 2-1). The free-product thickness in monitoring well ASE-107A on December 6, 2006 was less than the maximum free-product thickness observed in this well to date (0.73 foot on April 5, 2006). It should be noted that an automated free-product skimmer system is currently installed in monitoring well ASE-67A which controls the free-product thickness in the well. Therefore, the reported free-product thicknesses for monitoring well ASE-67A do not represent equilibrium conditions.

A comparison to the previous quarter's free-product thickness measurements (collected on September 6 and 7, 2006) shows that free product thicknesses decreased slightly in half the monitoring wells, and increased slightly in the other half, between September and December 2006 for wells containing product during both measurements (CH2M HILL, 2006b). Of the eight monitoring wells containing free product on December 4 and 6, 2006, the thickness of product decreased in three wells (ASE-51A, ASE-102A, and ASE-115A), increased in four wells (ASE-67A, ASE-89A, ASE-90A, and ASE-107A), and remained the same in one well (ASE-91A) from the measurements collected on September 6 and 7, 2006. Free product was encountered in monitoring well ASE-90A on December 6, 2006; this well did not contain free product on September 6, 2006 (prior to September 2006, free product was last encountered in monitoring well ASE-90A on March 1, 2006). Conversely, free product was not encountered on December 6, 2006 in monitoring well ASE-111A; this well contained free product during the previous quarter's monitoring round on September 6, 2006 at a thickness of 0.03 foot (CH2M HILL, 2006b).

The December 2006 free-product thickness measurements indicate that the free product was limited to three separate areas, similar to the previous reporting period (Figure 2-1). North of Air Lane on the Honeywell facility, free product was detected in monitoring wells ASE-51A, ASE-67A, and ASE-115A. South of Air Lane on the Honeywell facility, free product was detected in monitoring well ASE-91A located in the central portion of the area associated with the CAP. On Sky Harbor International Airport property, free product was detected in monitoring wells ASE-89A, ASE-90A, ASE-102A, and ASE-107A. Each of these

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free-product areas is delineated further by monitoring wells that did not contain free product (Figure 2-1).

As stated above, free product has been observed historically in 30 different monitoring wells located on the Honeywell facility and Sky Harbor International Airport property. The maximum free-product thickness measured in any of these wells since April 1999, when free product was first encountered in a monitoring well at the Honeywell facility, was 4.52 feet in monitoring well ASE-67A on July 26, 2005 (Figure 2-2).

The historical free-product thickness measurements show that the cross-gradient extent of the free-product pool can be defined historically by groundwater monitoring wells ASE-54A and ASE-66A to the northwest and by monitoring wells BC-7A and ASE-127A to the southeast. The upgradient (northeast) extent of the free-product pool can be delineated by monitoring wells ASE-59A, ASE-60A, and ASE-61A. According to the historical thickness measurements, the downgradient (south-southwest) extent of the free-product pool can be defined by monitoring wells ASE-58A, ASE-46A, ASE-62A, ASE-65A, ASE-126A, ASE-97A, BC-8B, ASE-95A, ASE-124A, ASE-100A, ASE-101A, ASE-101A, ASE-105A (Figure 2-2).

Honeywell collected a free-product sample from monitoring well ASE-107A on November 2, 2006. The free-product sample was fingerprinted for fuel type and analyzed for VOCs using USEPA Method 8260B. The results from the fingerprint analysis indicated that the free-product sample collected from monitoring well ASE-107A consisted of approximately 35 percent JP-4 fuel and 65 percent Jet-A fuel. The letter report and chromatograms for the fuel fingerprint analysis are included in Appendix A.

The VOC analysis of the free product was performed as both a diluted sample and a partition sample. The diluted sample was analyzed by diluting the free-product sample 500 times to lower the detection limits. This resulted in detection limits in the 10,000 to 50,000 micrograms per kilogram ( $\mu g/kg$ ) range, with only ethylbenzene (270,000  $\mu g/kg$ ) and total xylenes (estimated at 44,000  $\mu g/kg$ ) detected. No chlorinated VOCs were detected.

To obtain lower detection limits, a second aliquot of the free-product sample was shaken with an equal portion of laboratory water (partition sample), and the water was analyzed by USEPA Method 8260B. This resulted in detection limits generally in the 1 to 5 micrograms per liter ( $\mu$ g/L) range. Six VOCs (methylene chloride, benzene, toluene, ethylbenzene, total xylenes, and MTBE) were detected in the partition sample; none of the chlorinated VOCs of interest (TCE, 1,1,1-TCA, or their daughter products) were detected. The letter report describing the difference between the diluted sample VOC analysis and the partition sample VOC analysis, and the chromatograms and laboratory reports of the free-product sample collected from monitoring well ASE-107A are included in Appendix A.

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<sup>&</sup>lt;sup>1</sup> Note that the units differ from the initial analysis described in the preceding paragraph because the initial analysis was done directly on free product, which is measured by the laboratory in μg/kg. The second analysis was done directly on water in contact with the free product, thus the analysis of the water is measured by the laboratory in μg/L.

### 2.2 Groundwater

In accordance with Honeywell's *LUST Field Sampling Plan – Groundwater Sampling, Free Product Monitoring and Recovery Plan* (CH2M HILL, 2005a), Honeywell performs quarterly evaluations of the groundwater quality in the area associated with the CAP. In addition, Honeywell measures groundwater levels in monitoring wells associated with the CAP monthly, as presented in the above-referenced plan (CH2M HILL, 2005a). As part of the overall groundwater monitoring program for the Honeywell facility, groundwater levels are also measured quarterly in all other Honeywell groundwater monitoring wells. An evaluation of the groundwater levels and associated groundwater flow directions in December 2006 in the area associated with the CAP is presented in this section. Hydrographs illustrating water level elevations over time for each of Honeywell's UST monitoring wells are included in Appendix B.

Sixty-two monitoring wells were sampled as part of the quarterly UST monitoring program between December 7 and 15, 2006. Analytical results from these monitoring wells are presented in this quarterly status report on plan view maps and discussed below. Complete laboratory analytical and data validation reports are contained in Appendix C. A groundwater sample was not collected from monitoring well BC-18 during the December 2006 sampling event because this well was dry. This monitoring well was also dry during the September 2006 sampling event. A groundwater sample was not collected from monitoring well ASE-19A because there was not a sufficient amount of groundwater in the monitoring well casing to collect a representative sample. In addition, a groundwater sample was not collected from monitoring well ASE-67A due to the ongoing operation of an automated free-product skimmer system in the well.

This section includes plan view maps with posted water quality data for:

- Benzene.
- MTBE.
- Naphthalene.
- Benzo(a)pyrene.
- Total BTEX.
- TRPH.
- Total VOCs.
- Total non-fuel VOCs.
- Total TCE.
- Total 1,1,1-TCA.

Concentration contours are presented along with the posted data for the individual compounds (benzene, MTBE, naphthalene). These contours delineate areas exceeding regulatory standards and laboratory detection limits.

#### 2.2.1 Water-level Elevations

Groundwater elevations for all monitoring wells at and near the Honeywell facility were measured on December 6, 2006, except for monitoring well ASE-67A which was measured on December 4, 2006. These elevations and associated groundwater-level contours are presented on Figure 2-3 for the eastern portion of the Honeywell facility and Sky Harbor

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International Airport property. Similar to previous time periods, the direction of groundwater flow in this area was to the south-southwest (Figure 2-3). A comparison of water-level elevations collected in September and December 2006 shows that water levels rose in all but one monitoring well associated with the CAP (Table 2-2). The rise in water-level elevation between September and December 2006 ranged from 0.01 foot (ASE-98A) to 1.68 feet (ASE-127A), with an average rise of approximately 1.06 feet. The water-level elevation decreased by 0.1 foot in monitoring well ASE-99A, the southernmost well monitored by Honeywell. While the general rise in water levels between September and December 2006 appears to support the trend of increasing water levels observed during the previous two quarters, an evaluation of the monthly water levels during fourth quarter 2006 shows that water levels across the UST area generally peaked in October (southern portion) or November (northern portion), followed by declines in November or December, respectively. This more recent declining trend is apparent in the hydrographs presented in Appendix B, which illustrate water-level elevations over time for each of Honeywell's UST monitoring wells.

Honeywell has been evaluating the recent rising water levels observed in monitoring wells located on the Honeywell facility and the northern portion of Sky Harbor International Airport. This evaluation is being conducted as part of Honeywell's UST remedial design process. The preliminary indications from this evaluation suggest that discharge into the Salt River from sources, including the City of Tempe and the City of Mesa, caused the baseline flow in the Salt River channel to increase from about 1 to 2 cubic feet per second to approximately 10 cubic feet per second. This change in baseline flow, coupled with a few substantial precipitation events during the 2006 summer monsoon season, affected water levels in the area near the Salt River, including the Honeywell facility and Sky Harbor International Airport property. Records from the United States Geological Survey indicate that the increase in baseline flow in the Salt River began at roughly the same time as the winter 2004/2005 storms, which caused the initial rise in the water table and the divergence from the regional water-level declines. Honeywell's preliminary evaluation also found that the discharges by the City of Tempe ceased in early September 2006, and those from the City of Mesa are planned to cease or significantly decrease by early 2007. The reduction or discontinuation of these discharges should cause the localized water table to return to the regional decline seen in other areas of the Salt River Basin.

Honeywell is also following the City of Tempe's plan to install a pipe and pump system to pump water out of the area upstream of Tempe Town Lake and discharge it back into the Salt River riverbed downstream of the Lake's west dam. According to newspaper reports, the system is expected to pump out approximately 15 to 20 million gallons of water a day and be installed and working by the end of March. The effect this water bypass will have on water levels at and near the Honeywell facility is unknown at this time, but the effect, if any, will be closely monitored and discussed in future status reports as information becomes available.

#### 2.2.2 Benzene

Benzene was detected in groundwater throughout the eastern portion of the Honeywell facility and onto Sky Harbor International Airport property in December 2006, generally consistent with the historical areal extent of the free-product pool. The maximum

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concentration of benzene in December 2006 occurred in monitoring well ASE-63A (3,700  $\mu g/L$ ), as shown on Figure 2-4. This concentration was lower than the previous quarter's maximum of 5,600  $\mu g/L$ , which occurred in monitoring well ASE-115A, and lower than the concentration observed in this well in September 2006 (4,000  $\mu g/L$ ). Consistent with the data from September 2006 and prior sampling rounds, the highest benzene concentrations in December 2006 occurred in monitoring wells associated with the Area 2 fuel farm (ASE-63A, 3,700  $\mu g/L$ ; ASE-115A, 3,400  $\mu g/L$ ; ASE-39A, 900  $\mu g/L$ ; ASE-116A, 830  $\mu g/L$ ; ASE-38A, 750  $\mu g/L$ ). Concentrations of benzene exceeding the USEPA maximum contaminant level (MCL) of 5  $\mu g/L$  were detected both at the Honeywell facility and beneath the northern portion of Sky Harbor International Airport in December 2006, as shown on Figure 2-4.

On average, the December 2006 benzene concentrations were slightly higher than those in September 2006, with increases observed in monitoring wells on both the Honeywell facility and Sky Harbor International Airport property. Significant increases were observed in monitoring wells ASE-89A (190  $\mu$ g/L in September 2006 to 490  $\mu$ g/L in December 2006) and ASE-90A (7.4  $\mu$ g/L to 78  $\mu$ g/L, respectively). Of the increases in benzene concentrations between September and December, only one monitoring well's (ASE-92A) benzene concentration increased from below the MCL in September (3.6  $\mu$ g/L) to above the MCL in December (29  $\mu$ g/L).

As illustrated on Figure 2-4, 13 monitoring wells contained detectable concentrations of benzene in December 2006 that were reported as non-detect in September 2006. The reason for this sudden increase in detections is that analytical services were provided by a new laboratory (Columbia Analytical Services) in December that used a lower minimum reporting level (MRL) than the previous laboratory. By decreasing the MRL for most monitoring wells from 5  $\mu$ g/L to 1  $\mu$ g/L, observed concentrations in the range of 1 to 5  $\mu$ g/L now appear as detected concentrations. In addition, Columbia Analytical Services provided Honeywell with many estimated values below the MRL. These values are posted on the figures with their associated "J" flag but are not included within the outer contour. Of the 13 monitoring wells that were reported to contain benzene in December 2006 and not in September, the maximum concentration was 2.1  $\mu$ g/L (monitoring well ASE-58A), and 10 of the 13 wells contained estimated concentrations below 1  $\mu$ g/L, as shown on Figure 2-4.

Given the south-southwesterly direction of groundwater flow in the area, the extent of benzene concentrations exceeding the MCL is delineated in all directions. The upgradient (northeast) extent is delineated by monitoring wells ASE-59A, ASE-60A, and ASE-61A; the cross-gradient extent is delineated by monitoring wells PL-2101, ASE-66A, and ASE-54A to the northwest and by monitoring wells ASE-127A and BC-7A to the southeast, as illustrated on Figure 2-4. The downgradient (south-southwest) extent of benzene exceeding the MCL is delineated by monitoring wells ASE-58A, ASE-46A, PL-201A, ASE 62A, ASE-65A, ASE-126A, ASE-97A, ASE-95A, BC-8B, ASE-124A, ASE-96A, ASE-106A, ASE-102A, ASE-114A, and ASE-113A (Figure 2-4). Additional monitoring wells downgradient of the Honeywell facility did not contain detectable levels of benzene, as indicated on Figure 2-4.

### 2.2.3 Methyl Tert-butyl Ether

Consistent with previous sampling periods, MTBE was detected in groundwater throughout the eastern portion of the Honeywell facility and onto Sky Harbor International

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Airport property in December 2006. The maximum concentration of MTBE in December 2006 occurred in monitoring well ASE-89A (1,100 μg/L), located just south of the Honeywell facility on Sky Harbor International Airport property, as shown on Figure 2-5. This concentration was slightly higher than the MTBE concentration of 1,000 μg/L detected in this monitoring well in September 2006, but is consistent with the historical MTBE concentrations in this area. The concentration of MTBE in monitoring well ASE-115A decreased from the maximum concentration of 1,100 µg/L in September 2006 to 650 µg/L in December. In December 2006, additional elevated (>200 μg/L) MTBE concentrations of 220 μg/L, 490 μg/L, and 400 μg/L were detected south of the Area 2 fuel farm in monitoring wells ASE-116A, ASE-39A, and ASE-63A, respectively. Monitoring wells ASE-90A, ASE-96A, and ASE-106A, located south-southwest of monitoring well ASE-89A on Sky Harbor International Airport property, also had elevated (>200 μg/L) MTBE concentrations of 240 μg/L, 220 μg/L, and 370 μg/L, respectively. Concentrations of MTBE exceeding its ADEQ-recommended Tier 1 remedial level of 94 μg/L – the remedial level that should be used when an existing drinking water receptor is not affected or is not potentially affected by MTBE (ADEQ, 2002) – were detected both on the Honeywell facility and beneath the northern portion of Sky Harbor International Airport, as shown on Figure 2-5.

Overall, the December 2006 sampling results indicated some shifting of the concentrations of MTBE, with the majority of concentrations increasing from the previous quarterly sampling event in September 2006. The area that exceeded the Tier 1 remedial level of 94  $\mu$ g/L increased from the previous quarter, driven by the increase in MTBE concentrations in four monitoring wells (ASE-111A, 72  $\mu$ g/L in September 2006 to 110J  $\mu$ g/L in December 2006; ASE-68A, 78  $\mu$ g/L to 150  $\mu$ g/L; ASE-95A, 70  $\mu$ g/L to 160  $\mu$ g/L; and ASE-96A, 85  $\mu$ g/L to 220  $\mu$ g/L). The MTBE concentration in monitoring well ASE-41A decreased from 150  $\mu$ g/L to below the Tier 1 remedial level (59  $\mu$ g/L) between September and December, shifting the contour to the east in that area.

In December 2006, MTBE was detected in 19 monitoring wells that did not have detectable concentrations of MTBE during the previous sampling round. Twelve of these detections were reported below 5  $\mu$ g/L; these concentrations would not have been reported as detects in previous sampling periods because of the difference in the MRL in December 2006 versus September 2006, as discussed in Section 2.2.2. As a result of these detections, the contour illustrating the extent of detectable concentrations of MTBE expanded to the west, as shown on Figure 2-5. As with the reported benzene concentrations, the laboratory provided some estimated values of MTBE below the MRL. These values, associated with monitoring wells ASE-125A (0.19J  $\mu$ g/L), ASE-65A (0.22J  $\mu$ g/L), and PL-2101 (0.95J  $\mu$ g/L) are posted on the figures with their associated "J" flag but are not included within the outer contour (Figure 2-5).

Given the south-southwesterly direction of groundwater flow in the area, the extent of MTBE concentrations exceeding its Tier 1 remedial level is delineated in all directions. The upgradient (northeast) extent is delineated by monitoring wells ASE-51A, ASE-52A, ASE-53A, ASE-60A, and ASE-61A; the cross-gradient extent is delineated by monitoring wells ASE-66A, PL-2101, ASE-20A, ASE-56A, and ASE-57A to the northwest and by monitoring wells ASE-38A, ASE-37A, PL-101A, ASE-127A, BC-7A, and ASE-64A to the southeast (Figure 2-5). The downgradient (south-southwest) extent of MTBE exceeding its Tier 1 remedial level is delineated by monitoring wells ASE-41A, ASE-46A, ASE-62A,

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ASE-55A, ASE-108A, PL-105A, ASE-91A, BC-8B, ASE-125A, ASE-124A, ASE-101A, ASE-102A, ASE-107A, and ASE-113A (Figure 2-5). Additional monitoring wells downgradient of the Honeywell facility did not contain detectable levels of MTBE, as indicated on Figure 2-5.

Based on the December 2006 data, the extent of the MTBE plume on Sky Harbor International Airport property was delineated to ADEQ's investigative level of 20  $\mu$ g/L by monitoring wells ASE-97A, ASE-126A, ASE-125A, ASE-103A, ASE-100A, and ASE-124A to the west and by monitoring wells ASE-101A, ASE-102A, ASE-102A, ASE-110A, ASE-107A, ASE-114A, ASE-109A, ASE-123A, ASE-122A, and ASE-113A to the south (Figure 2-5).

#### 2.2.4 Naphthalene

Naphthalene was detected in groundwater throughout the eastern portion of the Honeywell facility and onto Sky Harbor International Airport property, generally consistent with the extent of the free-product pool, although the extent of naphthalene was further west but not as far to the south. The maximum concentration of naphthalene in December 2006 occurred in monitoring well ASE-57A (470 µg/L), located in the parking lot north of Air Lane, as shown on Figure 2-6. The concentration of naphthalene in monitoring well ASE-56A increased from 250 µg/L in September 2006 to 450 µg/L in December 2006, thus increasing the area where the naphthalene concentrations exceeded the health-based guidance level of  $280 \,\mu g/L$ . Other detectable concentrations of naphthalene above the laboratory MRL in December 2006 ranged from 2.6  $\mu$ g/L (ASE-97A and BC-7A) to 220  $\mu$ g/L (ASE-115A). In addition, Columbia Analytical Services estimated concentrations below 2 µg/L at nine locations scattered around the fringes of the naphthalene plume and on Sky Harbor International Airport property. These values are posted on the figures with their associated "J" flag, but are not included within the outer contour (Figure 2-6). As indicated on Figure 2-6, the area where the naphthalene concentration exceeded the health-based guidance level is limited and defined by the Honeywell UST monitoring well network.

## 2.2.5 Benzo(a)pyrene

An estimated benzo(a)pyrene concentration of 0.019J  $\mu$ g/L (below the reporting limit of 0.1  $\mu$ g/L) was reported in the sample collected from monitoring well ASE-122A. Benzo(a)pyrene was not detected in any other monitoring well sampled in December 2006, as shown on Figure 2-7.

## 2.2.6 Total Benzene, Toluene, Ethylbenzene, and Xylenes

Total BTEX consists of the sum of concentrations of benzene, toluene, ethylbenzene, and total xylenes (meta, para, and ortho isomers). BTEX components were detected throughout the area associated with the CAP in December 2006, with a maximum total BTEX concentration of  $4,374~\mu g/L$  in monitoring well ASE-63A, as shown on Figure 2-8. Total BTEX concentrations exceeding  $500~\mu g/L$  were detected in eight monitoring wells located in the northern portion of the area associated with the CAP. These monitoring wells were located either adjacent to the Area 2 fuel farm (ASE-63A, ASE-115A, ASE-39A, ASE-116A, and ASE-38A), north of the Area 2 fuel farm (ASE-52A), or west of the Area 2 fuel farm (ASE-56A and ASE-57A), as shown in Figure 2-8. This is roughly the same concentration pattern as the previous quarter (September 2006), although concentrations exceeding  $500~\mu g/L$  were located further north, but not as far south, as those detected in September 2006.

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Detections of BTEX compounds at locations where these compounds had not been previously observed were primarily due to either the lower laboratory MRL, or estimated concentrations below the MRL, as indicated on Figure 2-8 (if at least one of the BTEX components was estimated by the laboratory and flagged "J," the sum presented on Figure 2-8 was also flagged "J"). Twelve of the 26 monitoring wells located on Sky Harbor International Airport property did not contain detectable levels of BTEX components in December 2006, as shown on Figure 2-8.

#### 2.2.7 Total Recoverable Petroleum Hydrocarbons

TRPH consists of the sum of compounds with the carbon range  $C_{10}$  to  $C_{32}$ . TRPH compounds were detected throughout the area associated with the CAP in December 2006, with a maximum TRPH concentration of 10,000 µg/L in monitoring well ASE-55A, as shown on Figure 2-9. This was a decrease from the maximum TRPH concentration of 15,000 µg/L detected in monitoring well ASE-57A in September 2006. The TRPH concentration in monitoring well ASE-57A decreased from 15,000 µg/L in September 2006 to 3,766J µg/L in December 2006, while the TRPH concentration in monitoring well ASE-55A increased from 3,500 µg/L in September 2006 to 10,000 µg/L in December 2006. TRPH concentrations equaling or exceeding 1,000 µg/L were detected in eight monitoring wells in December 2006, with six of the eight wells located on the Honeywell facility. Unlike the BTEX components, the highest TRPH concentrations were not found in the area associated with the Area 2 fuel farm. Rather, the majority of the maximum concentrations were detected in monitoring wells located downgradient of a known historical fuel release from the original Area 2 fuel farm (southwest corner of Building 230), as shown on Figure 2-9.

Fifteen monitoring wells that did not contain detectable levels of TRPH compounds during the September 2006 sampling event had reported detections of TRPH during the December 2006 round. The maximum TRPH concentration observed in these 15 monitoring wells was 93J  $\mu$ g/L (monitoring well ASE-106A), with an average concentration of 54  $\mu$ g/L. The majority of these reported detections were a result of the laboratory estimating concentrations below their MRL, as shown on Figure 2-9 (estimated concentrations are flagged "J"). Because TRPH consists of two components ( $C_{10}$ - $C_{22}$  and  $C_{22}$ - $C_{32}$ ), if either one of these components was given a "J" flag by the laboratory, the TRPH value posted on Figure 2-9 was also flagged. Laboratory data sheets, indicating if the concentrations from one or both of the TRPH components were estimated for each sample, can be found in Appendix C.

Seven of the 26 monitoring wells located on Sky Harbor International Airport property did not contain detectable levels of TRPH in December 2006.

### 2.2.8 Total Volatile Organic Compounds

Total VOCs consists of the sum of detected concentrations from the USEPA Method 8260 analyte list. VOCs were detected in all monitoring wells sampled in December 2006, with a maximum total VOC concentration of 5,032J  $\mu$ g/L in monitoring well ASE-115A, as shown on Figure 2-10. Total VOC concentrations exceeding 750  $\mu$ g/L were detected in the same monitoring wells as those containing concentrations of total BTEX greater than 500  $\mu$ g/L,

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with the addition of monitoring well ASE-89A, which contained a total BTEX concentration of 495  $\mu$ g/L (Figure 2-10).

Total VOC concentrations observed in December 2006 were higher in the majority of monitoring wells as compared to the September 2006 results. Included in this were 15 monitoring wells, located on the fringes of the area associated with the CAP, that did not contain detectable levels of VOCs in September 2006 but were reported to contain VOCs in December 2006. The maximum total VOC concentration observed in these 15 monitoring wells was 15.7J  $\mu$ g/L (monitoring well BC-7A), with an average concentration of 3.4  $\mu$ g/L. Similar to the other compounds discussed in this report, the majority of these reported detections were a result of the laboratory estimating concentrations below their MRL, as shown on Figure 2-10. Because of the number of compounds that comprise the total VOC concentration, every result posted on Figure 2-10 is flagged "J," meaning that at least one VOC concentration was estimated by the laboratory below their MRL. Laboratory data sheets indicating which concentrations for a particular sample were estimated can be found in Appendix C.

#### 2.2.9 Total Non-fuel Volatile Organic Compounds

Total non-fuel VOCs consists of the sum of detected concentrations from a list of analytes prepared by a CH2M HILL chemist and are shown in Table 2-3. The analytes listed in Table 2-3 represent compounds not related to releases of petroleum hydrocarbons (e.g., jet fuel). Non-fuel VOCs were detected in all monitoring wells sampled in December 2006 but at much lower concentrations than total VOCs. This is consistent with the location of the sampled monitoring wells, which are in an area primarily contaminated with fuel-related compounds. The maximum total non-fuel VOC concentration in December 2006 was 189  $\mu$ g/L in monitoring well ASE-91A, as shown on Figure 2-11. This concentration represented an increase from the September 2006 maximum total non-fuel VOC concentration of 138  $\mu$ g/L, also detected in monitoring well ASE-91A. Three other monitoring wells sampled during December 2006, all located on the Honeywell facility, contained a total non-fuel VOC concentration exceeding 100  $\mu$ g/L (ASE-46A, 120  $\mu$ g/L; PL-105A, 118  $\mu$ g/L; ASE-56A, 109  $\mu$ g/L). Monitoring well ASE-115A, which contained the highest concentration of total VOCs, only contained a total non-fuel VOC concentration of 7.35J  $\mu$ g/L (i.e., the majority of the detectable compounds were fuel-related).

Similar to total VOCs, total non-fuel VOC concentrations observed in December 2006 were higher in the majority of monitoring wells as compared to the September 2006 results. Included in this were 21 monitoring wells, located on the fringes of the area associated with the CAP, that did not contain detectable levels of non-fuel VOCs in September 2006 but were reported to contain non-fuel VOCs in December 2006. The maximum total non-fuel VOC concentration observed in these 21 monitoring wells was 8.2J  $\mu$ g/L (monitoring well BC-7A), with an average concentration of 1.8  $\mu$ g/L. As with the other compounds discussed in this report, the majority of these reported detections were a result of the laboratory estimating concentrations below their MRL, as shown on Figure 2-11. Because of the number of compounds that comprise the total non-fuel VOC concentration, every result posted on Figure 2-11 is flagged "J," meaning that at least one non-fuel VOC concentration was estimated by the laboratory below their MRL. Laboratory data sheets indicating which concentrations for a particular sample were estimated can be found in Appendix C.

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#### 2.2.10 Total Trichloroethylene

Total TCE consists of the sum of detected concentrations of TCE and its daughter products, cis-1,2-dichloroethene and vinyl chloride. Calculating values of total TCE allows for an evaluation of the distribution of compounds related to releases of TCE, where the parent compound (TCE) may have degraded to its daughter products. In December 2006, TCE and related compounds were detected at relatively low concentrations throughout the area associated with the CAP on the Honeywell facility, with low ( $<8~\mu g/L$ ) detections observed in monitoring wells located on Sky Harbor International Airport property, as shown on Figure 2-12. The maximum total TCE concentration in December 2006 was observed in monitoring well ASE-68A ( $50~\mu g/L$ ), located adjacent to Buildings 202, 203, and 204 in the northern portion of the area associated with the CAP on the Honeywell facility (Figure 2-12). Total TCE concentrations exceeding 25  $\mu g/L$  were only detected in two monitoring wells: ASE-68A ( $50~\mu g/L$ ) and ASE-60A ( $32~\mu g/L$ ). No total TCE concentration exceeded  $10~\mu g/L$  on Sky Harbor International Airport property (maximum of 7.6  $\mu g/L$  in monitoring well BC-8B), and six of the 26 monitoring wells located on Sky Harbor International Airport property did not contain detectable levels of TCE-related compounds.

Twenty-five monitoring wells, 16 of which are located on Sky Harbor International Airport property, were reported to contain total TCE concentrations in December 2006 that did not have detectable concentrations in September 2006. The maximum total TCE concentration observed in these 25 monitoring wells was 16.1J  $\mu$ g/L (monitoring well ASE-57A), with an average concentration of 1.9  $\mu$ g/L. The majority of these reported detections, as well as most of the other reported detections, were flagged "J" by the laboratory, indicating the concentration was estimated below the MRL. Laboratory data sheets indicating which concentrations for a particular sample were estimated can be found in Appendix C.

#### 2.2.11 Total 1,1,1-trichloroethane

Total 1,1,1-TCA consists of the sum of detected concentrations of 1,1,1-TCA and its daughter products, 1,1-dichloroethane, 1,1-dichloroethene, and chloroethane. Similar to total TCE, calculating values of total 1,1,1-TCA allows for an evaluation of the distribution of compounds related to releases of 1,1,1-TCA where the parent compound (1,1,1-TCA) may have degraded to its daughter products. Compounds related to 1,1,1-TCA were detected in monitoring wells located throughout the area associated with the CAP in December 2006, with a maximum total 1,1,1-TCA concentration of 166  $\mu$ g/L in monitoring well ASE-91A, as shown in Figure 2-13. In addition to monitoring well ASE-91A, total 1,1,1-TCA concentrations exceeding 50  $\mu$ g/L were only detected in three other monitoring wells: PL-105A (96  $\mu$ g/L), ASE-46A (94  $\mu$ g/L), and ASE-56A (89  $\mu$ g/L). Only four of the 26 monitoring wells located on Sky Harbor International Airport property did not contain detectable levels of 1,1,1-TCA-related compounds, as shown on Figure 2-13.

Similar to total TCE, 28 monitoring wells, 13 of which are located on Sky Harbor International Airport property, were reported to contain total 1,1,1-TCA concentrations in December 2006 that did not have detectable concentrations in September 2006. The maximum total 1,1,1-TCA concentration observed in these 28 monitoring wells was 3.1J  $\mu$ g/L (monitoring well ASE-61A), with an average concentration of 1.1  $\mu$ g/L. All of these reported detections, as well as most of the other reported detections, were flagged "J" by the laboratory, indicating that the concentration was estimated below the MRL (Figure 2-13).

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Laboratory data sheets indicating which concentrations for a particular sample were estimated can be found in Appendix C.

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## 3.0 Site Remediation Activities

This section summarizes the scope and results of site remediation activities conducted during the fourth quarter of 2006.

## 3.1 Free-product Recovery

During fourth quarter 2006, Honeywell continued to manually recover free product biweekly from monitoring wells with free-product thicknesses greater than 0.1 foot. A portable free-product pump, the *Spill Buddy Pro*<sup>TM</sup>, from Clean Earth Technology, was used to manually recover the free product.

Free product was also recovered from monitoring well ASE-67A using an automated free-product skimming pump, the *Magnum Spill Buster*<sup>TM</sup>, from Clean Earth Technology, which was installed on December 24, 2005. The pump was installed in monitoring well ASE-67A in conformance with CAP free-product monitoring and recovery requirements.

Approximately 23 gallons of free product, including 20.7 gallons from monitoring well ASE-67A, were recovered during fourth quarter 2006. This compares to the approximate 23 gallons recovered during third quarter 2006, 62 gallons recovered during second quarter 2006, and 22 gallons recovered during first quarter 2006. Approximately 7,188 gallons have been recovered using skimming technologies since free-product recovery efforts began on June 1, 1999. Table 3-1 summarizes the amount of free product recovered at each monitoring well that has historically had measurable free product.

## 3.2 Bioenhanced Soil-vapor Extraction

### 3.2.1 BSVE Air Permitting

On October 13, 2006, Honeywell submitted a revision to the BSVE air permit application, as requested by the Maricopa County Air Quality Department (MCAQD). In anticipation of a public hearing in 2007, MCAQD hosted an informal public meeting on October 24, 2006 to solicit input from concerned citizens on the air permit. Representatives from MCAQD's permitting consultant (Kleinfelder), Honeywell, and CH2M HILL presented at the public meeting. The revised BSVE air permit application was determined to be administratively complete on October 26, 2006. On December 27, 2006, MCAQD provided Honeywell with a draft version of the proposed BSVE air permit for review and comment prior to issuing the draft permit for public review. Based on available information received from MCAQD and Kleinfelder, the approximate timeline for issuing a final permit is roughly early third quarter 2007. This includes time for:

- Finalization of the draft permit.
- Public notice.
- Public hearing and response to comments.

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- Revision of the draft permit.
- USEPA review of the permit.

Upon issuance of the final air permit, Honeywell will commence construction of the BSVE system piping at the Honeywell facility and initiate the process for procuring air treatment equipment. Honeywell will continue to work with MCAQD and Kleinfelder and provide the status of the air permit to ADEQ in future quarterly status reports.

#### 3.2.2 BSVE Field Activities

Honeywell continued to monitor 13 Sky Harbor International Airport subsurface utility vaults monthly for O<sub>2</sub>, CO<sub>2</sub>, methane, and %LEL. Monthly monitoring during fourth quarter 2006 occurred on October 10, November 9, and December 15, 2006. Results from these three monitoring events indicated that methane concentrations and %LEL in Sky Harbor International Airport subsurface utility vaults continue to be non-detect. On December 15, 2006 the City of Phoenix and Honeywell agreed that beginning in first quarter 2007, subsurface utility vault monitoring for O<sub>2</sub>, CO<sub>2</sub>, methane, and %LEL will be conducted quarterly for the Sky Harbor International Airport subsurface utility vaults. The next anticipated field measurement sampling event for O<sub>2</sub>, CO<sub>2</sub>, methane, and %LEL at the Sky Harbor International Airport subsurface utility vaults is anticipated to be in February 2007. Table 3-2 presents the fourth quarter 2006 subsurface utility vault air field parameter measurements.

Honeywell conducted the remaining helium tracer/well dilution tests on October 5, October 10, October 18, November 14, and November 15, 2006. The results of the fourth quarter 2006 helium tracer/well dilution tests are presented in Table 3-3. The analytical laboratory report is contained in Appendix C.

A long-term soil-vapor test was conducted at vapor monitoring well P-17-M on November 27 and 28, 2006 to monitor soil-vapor concentrations during an extended period of rising barometric pressure. Barometric pressure was monitored hourly, and the soil vapor at P-17-M was sampled shortly before, during, and after a period of sustained rising barometric pressure. Using a GEM 2000 vapor meter, soil-vapor was monitored for O<sub>2</sub>, CO<sub>2</sub>, methane, and %LEL. No helium injection occurred during the long-term test at P-17-M, and no helium analysis was performed on soil-vapor samples. Table 3-4 presents the data collected during the P-17-M long-term test.

Both the well dilution data and the P-17-M long-term soil-vapor test data was evaluated and presented in a draft technical memorandum, which was submitted to the City of Phoenix on December 18, 2006 for review and comment. This technical memorandum will be submitted to ADEQ during first quarter 2007, once the City of Phoenix's comments have been addressed.

### 3.2.3 Vapor Monitoring Program

Figure 3-1 illustrates the monitoring well and subsurface utility vault locations. Since the *Final Field Sampling Plan for PSHIA Subsurface Utility Vaults for Baseline Air Sampling Using EPA Method TO-15* (CH2M HILL, 2006c) was prepared, there has yet to be a 30-day period between the time stormwater was removed from the vaults and the next precipitation event; therefore, the Field Sampling Plan was not implemented during the fourth quarter 2006. On

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December 22, 2006, the City of Phoenix asked that Honeywell schedule the vault sampling for vaults that did not have standing water or were not damp from previous precipitation events during the week of January 15, 2007.

On November 8, 2006 at a meeting with the City of Phoenix, Honeywell presented the Draft Interim Soil Vapor Monitoring Plan for vapor monitoring to be implemented prior to the construction and startup of the BSVE system. This plan proposes the installation of additional soil-vapor monitoring wells, additional sub-slab monitoring points, and subsurface utility vault air monitoring. It is anticipated that the City of Phoenix will provide comments to this plan in January 2007, and the Final Interim Soil Vapor Monitoring Work Plan will be submitted to ADEQ in late first quarter 2007 or early second quarter 2007.

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# 4.0 Summary of Planned Work

The following activities are planned for the period from January 2007 through March 2007:

- Conduct first quarter groundwater sampling event for 2007 (tentatively scheduled for March 12 through March 23, 2007), monthly water-level measurements, and biweekly and monthly free-product monitoring and recovery in accordance with the LUST Field Sampling Plan – Groundwater Sampling, Free Product Monitoring and Recovery Plan (CH2M HILL, 2005a).
- Continue to work with Maricopa County on the progress of the BSVE air permit and submit any requested supplemental material in a timely manner.
- Extraction well tests will be conducted in February and March (tentatively scheduled for February 19 through March 2, 2007). The field work will consist of multiple flow versus vacuum tests conducted at 26 BSVE monitoring wells on both the Honeywell facility and Sky Harbor International Airport property.
- Conduct field parameter monitoring from select Sky Harbor International Airport subsurface utility vaults in March 2007.
- Conduct USEPA TO-15 sampling from select Sky Harbor International Airport subsurface utility vaults beginning the week of January 15, 2007.
- Honeywell and Maricopa County will be giving a joint presentation regarding the status of the BSVE air permit to the Sky Harbor Neighborhood Association on January 9, 2007.
- Address internal comments on the BSVE design drawings and specifications for the Honeywell facility and begin assembling a design package for submittal to the City of Phoenix's Design Services Department (DSD) and Aviation Department's Tenant Improvement (TI) program in late second quarter 2007 or early third quarter 2007.

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# 5.0 Summary of Problems and Delays

Sky Harbor International Airport subsurface utility vault air sampling for VOCs using USEPA Method TO-15 was postponed due to weather delays. Honeywell continues to monitor precipitation events so that vault air sampling can occur as soon as the weather permits.

Access issues related to increased holiday traffic at Sky Harbor International Airport prevented Honeywell from monitoring/recovering free product from monitoring well ASE-107A during a few biweekly events in the fourth quarter 2006. Honeywell will continue to maintain biweekly monitoring/recovery from monitoring well ASE-107A as Airport access allows and free-product thicknesses warrant.

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# 6.0 Status of Deliverables

The following is a list of deliverables submitted through third quarter 2006 since the *Site Characterization Report* dated August 23, 2002:

- On November 29, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the Fourth Quarter Status Report for 2006, Honeywell 34<sup>th</sup> Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15.
- On November 29, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the Field Sampling Plan for PSHIA Subsurface Utility Vaults for Baseline Air Sampling Using EPA Method TO-15, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15.
- On October 20, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Air Injection Pilot Test Report Honeywell 34<sup>th</sup> Street Facility, Facility ID No. 0-002227, LUST File Nos.* 0393.02-.10, .15.
- On September 15, 2006, Honeywell submitted a letter to ADEQ proposing to modify the scheduled submittal dates of quarterly status reports such that future reports are submitted to ADEQ no later than 60 days following the end of each calendar quarter.
- On August 3, 2006, Honeywell submitted to ADEQ a letter "RE: *Modification to Final Air Injection Pilot Test Work Plan*," dated October 4, 2005, that explained the method for conducting a short-term pilot test and the plan for implementation on Sky Harbor International Airport Property.
- On July 20, 2006, Honeywell submitted to ADEQ a letter that explained the status of the pilot test, Honeywell's agreement with the COP to evaluate the BSVE design, assuming 8 percent oxygen utilization rate, and the status of the air permit applications.
- On July 14, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the Second Quarter Status Report for 2006, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15.
- On April 14, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *First Quarter Status Report for 2006, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15.*
- On March 2, 2006, Honeywell submitted to ADEQ the *Proposed Modification to Honeywell's Groundwater Sampling, Free Product Monitoring and Recovery Plan* Total Recoverable Petroleum Hydrocarbons Analytical Method, LUST File #0393.02-.10, .15, Facility ID #0-002227.
- On January 16, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the Quarterly Status Report, Quarter 1 (October 17, 2005 to January 15, 2006), Honeywell 34<sup>th</sup> Street Facility, Facility ID No. 0-002227, LUST File No. 0393.02-.10, .15.

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- On January 13, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the Soil Vapor Field Sampling Report, Honeywell 34th Street Facility, 111 S. 34th Street, Phoenix, Arizona.
- On December 9, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the LUST Field Sampling Plan Groundwater Sampling, Free Product Monitoring and Recovery Plan.
- On December 7, 2005, CH2M HILL, on behalf of Honeywell, submitted to Maricopa County (1) the Revised Air Permit Application for BSVE and (2) the Air Permitting Evaluation for Air Injection Pilot Study. On December 19, 2005, copies of the Revised Air Permit Application for BSVE were sent to ADEQ, COP Aviation Department, and USEPA.
- On November 17, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ's LUST Enforcement Unit, a letter that explained the reasons for the differences in the timeline for "Startup and Initial Testing" presented in the revised schedule (Revised Figure 32, attachment to the November 2, 2005 letter) and the original schedule in the CAP.
- On November 2, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ's LUST Enforcement Unit, a letter that provided a status update on several aspects of the CAP implementation and on the conditions set forth in ADEQ's October 7, 2005 CAP approval letter. Attachments to this letter include (1) revised Figure 32 Remedial Alternative 3 Implementation Schedule, (2) free-product thickness map, October 2005, (3) list of site characterization activities since submittal of the *Site Characterization Report*, (4) updated site characterization figures and tables, (5) boring logs, and (6) a CD containing analytical and monitoring well measurement data.
- On October 20, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the Work Plan for Additional Characterization of LUST File #0393.15 JP-4 Fuel Pipeline Release at the Honeywell 34<sup>th</sup> Street Facility.
- On October 4, 2005, Honeywell submitted to ADEQ the Final Air Injection Pilot Test Work Plan, Honeywell 34<sup>th</sup> Street Facility and Phoenix Sky Harbor International Airport North Airfield, Phoenix, Arizona.
- On September 19, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Quality Assurance Project Plan, Honeywell 34th Street Facility*.
- On September 7, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the Work Plan for Phase III Monitoring Well Installation on Honeywell Leasehold and Phoenix Sky Harbor International Airport, Honeywell 34th Street Facility.
- On August 22, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Work Plan for Installation of Multi Level Soil Vapor Monitoring Wells and Shallow/Sub-slab Soil Vapor Monitoring Points, Honeywell 34th Street Facility.*
- On July 11, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Soil Vapor Baseline Sampling and Analysis Plan, Honeywell 34th Street Facility*.

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- On July 1, 2005, Honeywell submitted to ADEQ's Tank Programs Division the *Free Product Report LUST File* #0393.15 *JP-4 Fuel Line from UST* #203.
- On June 13, 2005, Honeywell submitted to ADEQ's Tank Programs Division the *Initial Site Characterization Report LUST File* #0393.15 *JP-4 Fuel Line from UST* #203.
- On March 29, 2005, Honeywell submitted to ADEQ's Tank Programs Division the *14-day Report LUST File #0393.15 JP-4 Fuel Line from UST #203.*
- On November 15, 2004, CH2M HILL, on behalf of Honeywell, submitted to ADEQ's UST Corrective Action Section responses to ADEQ's September 30, 2004 comments on Honeywell's July 30, 2004 *Revised Corrective Action Plan*. The corresponding replacement pages of the revised text, tables, and figures of the Revised CAP were also submitted.
- On July 30, 2004, CH2M HILL, on behalf of Honeywell, submitted the *Revised Corrective Action Plan* to ADEQ's UST Corrective Action Section. The Revised CAP supersedes and replaces the original July 18, 2003, CAP.
- On May 27, 2004, Honeywell submitted a three-ring binder to ADEQ's UST Corrective Action Section titled "Supporting Material, UST Informal Settlement Conference, May 28, 2004."
- On May 7, 2003, CH2M HILL, on behalf of Honeywell, submitted to ADEQ a technical memorandum titled "Summary of Results from the Bioventing/SVE Pilot Study February 24 through March 1, 2003."
- On May 1, 2003, Honeywell submitted to ADEQ's UST Corrective Action Section the Free-product Report, Honeywell International Inc., 34<sup>th</sup> Street Facility, Phoenix, Arizona, Facility ID# 0-002227, LUST File Nos. 0393.02 -.10.
- On December 18, 2002, Honeywell submitted to ADEQ's UST Corrective Action Section Supplemental Site Characterization Information for the Honeywell International Inc., 34<sup>th</sup> Street Facility, Phoenix, Arizona, Facility ID# 0-002227, LUST File Nos. 0393.02 -.10.
- On August 23, 2002, CH2M HILL, on behalf of Honeywell, submitted the *Site Characterization Report* to ADEQ's UST Corrective Action Section.

#### The following are deliverables planned for submittal:

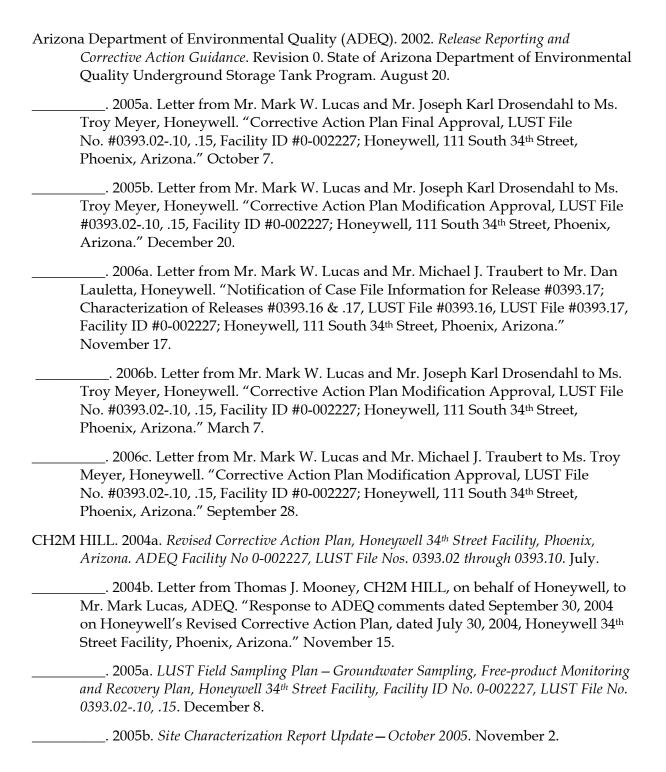
- Honeywell is in the process of finalizing the *Evaluation of Well Dilution Effects, Honeywell* 34<sup>th</sup> Street Facility and Phoenix Sky Harbor International Airport, Phoenix, Arizona technical memorandum and will submit to ADEQ in the first quarter 2007.
- Honeywell is in the process of finalizing the *Biologically Enhanced SVE with Product Recovery System Design Basis Report Honeywell International 34th Street Facility Phoenix, Arizona* and will submit the Design Basis Report to ADEQ in the first quarter 2007. Honeywell provided the draft Design Basis Report to the City of Phoenix on December 6, 2006. Honeywell received the City of Phoenix's comments on January 4, 2007.
- Honeywell is in the process of finalizing the Interim Soil Vapor Monitoring Plan for soil-vapor monitoring to be implemented prior to the construction and startup of the BSVE system and submit to ADEQ late first quarter 2007 or early second quarter 2007.

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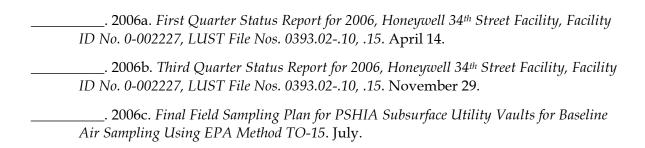
- Honeywell is preparing the *Biologically Enhanced SVE with Product Recovery System Design Basis Report North Airfield Project Design Basis Report Honeywell International* 34<sup>th</sup> *Street Facility Phoenix, Arizona* and plans to submit to the City of Phoenix in February 2007 with subsequent submittal to ADEQ in the second quarter 2007.
- Honeywell is in the process of completing the design of the BSVE system on the Honeywell facility in order to submit for DSD and TI review. Honeywell is coordinating with DSD and TI staff regarding the contents of the design package and anticipates submittal of this package late first quarter 2007 or early second quarter 2007. Once DSD and TI comments have been incorporated, the design will be finalized and submitted to contractors for bidding. ADEQ will be provided with a copy of the final design package during the third quarter 2007.
- First Quarter Status Report for 2007, Honeywell 34<sup>th</sup> Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17. This report is currently scheduled for submittal to ADEQ on May 30, 2007.

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## 7.0 References



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TABLE 2-1 Summary of Free-product Thickness Measurements, Fourth Quarter 2006 Fourth Quarter Status Report, Honeywell 34th Street Facility, Phoenix, Arizona

	·		Free-product Thickness (feet)					
Well	10/05	10/10	11/01	11/16	11/29	12/06	12/15	12/21
ASE-19A	0	NM	0	NM	NM	0	NM	NM
ASE-20A	NM	NM	0	NM	NM	0	NM	NM
ASE-37A	0	NM	0	NM	NM	0	NM	NM
ASE-38A	0	NM	0	NM	NM	0	NM	NM
ASE-39A	0	NM	0	NM	NM	0	NM	NM
ASE-41A	0	NM	0	NM	NM	0	NM	NM
ASE-51A	0.01	NM	0.02	NM	NM	0.04	NM	NM
ASE-52A	0	NM	0	NM	NM	0	NM	NM
ASE-53A	0	NM	0	NM	NM	0	NM	NM
ASE-55A	0	NM	0	NM	NM	0	NM	NM
ASE-56A	0	NM	0	NM	NM	0	NM	NM
ASE-57A	0	NM	0	NM	NM	0	NM	NM
ASE-63A	0	NM	0	NM	NM	0	NM	NM
ASE-64A	0	NM	0	NM	NM	0	NM	NM
ASE-67A	0.35	0.18	NM	NM	0.3	0.23*	0.26	0.1
ASE-68A	0	NM	0	NM	NM	0	NM	NM
ASE-89A	0.09	NM	0.04	NM	NM	0.09	NM	NM
ASE-90A	0.01	NM	0.01	NM	NM	0.01	NM	NM
ASE-91A	0.02	NM	0.02	NM	NM	0.02	NM	NM
ASE-92A	0	NM	0	NM	NM	0	NM	NM
ASE-96A	0	NM	0	NM	NM	0	NM	NM
ASE-102A	0.06	NM	0.06	NM	NM	0.06	NM	NM
ASE-107A	0.15	NM	0.69	0.38	NM	0.41	0.46**	NM
ASE-111A	0.02	NM	0.05	NM	NM	0	NM	NM
ASE-113A	0	NM	0	NM	NM	0	NM	NM
ASE-114A	0	NM	0	NM	NM	0	NM	NM
ASE-115A	0.04	NM	0.03	NM	NM	0.02	NM	NM
PL-101A	0	NM	0	NM	NM	0	NM	NM
PL-105A	0	NM	NM	NM	NM	0	NM	NM
PL-2101	0	NM	0	NM	NM	0	NM	NM

#### Notes:

This table includes all wells that have historically had measurable free product. Monitoring wells with a free-product thickness less than 0.1 foot are measured monthly. Monitoring wells with a free-product thickness greater than 0.1 foot are measured biweekly.

NM — Free product thickness not measured.

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<sup>\*</sup>Measurement collected on December 4, 2006.

<sup>\*\*</sup>Measurement collected on December 13, 2006.

TABLE 2-2 Comparison between September 2006 and December 2006 Water Level Elevations Fourth Quarter Status Report, Honeywell 34th Street Facility, Phoenix, Arizona

	Groundwate		
Location ID	9/06/2006 (ft amsl)	12/06/2006 (ft amsl)	Difference (feet)
ASE-19A	1053.19	1054.52	1.33
ASE-20A	1051.69	1052.97	1.28
ASE-37A	1056.27	1057.76	1.49
ASE-38A	1056.65	1058.14	1.49
ASE-39A	1055.90	1057.39	1.49
ASE-41A	1050.59	1051.95	1.36
ASE-46A	1049.45	1050.62	1.17
ASE-51A	1054.05	1055.49	1.44
ASE-52A	1056.07	1057.52	1.45
ASE-53A	1056.59	1058.08	1.49
ASE-54A	1051.35	1052.50	1.15
ASE-55A	1046.73	1048.30	1.57
ASE-56A	1050.64	1051.76	1.12
ASE-57A	1051.79	1053.16	1.37
ASE-58A	1049.58	1050.71	1.13
ASE-59A	1056.50	1057.94	1.44
ASE-60A	1057.49	1058.92	1.43
ASE-61A	1057.95	1059.41	1.46
ASE-62A	1047.39	1048.42	1.03
ASE-63A	1054.62	1056.16	1.54
ASE-64A	1049.41	1050.87	1.46
ASE-65A	1035.16	1036.13	0.97
ASE-66A	1052.46	1053.69	1.23
ASE-67A	1056.12	NM	NA
ASE-68A	1051.93	1053.26	1.33
ASE-89A	1048.08	1049.39	1.31
ASE-90A	1047.05	1047.95	0.90
ASE-91A	1048.08	1049.29	1.21
ASE-92A	1048.48	1049.76	1.28
ASE-95A	1037.00	1037.52	0.52
ASE-96A	1046.20	1046.88	0.68
ASE-97A	1036.76	1037.58	0.82
ASE-98A	1041.39	1041.40	0.01
ASE-99A	1043.34	1043.24	-0.10
ASE-100A	1037.89	1038.29	0.40
ASE-101A	1041.34	1041.62	0.28
ASE-102A	1044.79	1045.17	0.38
ASE-103A	1036.07	1036.46	0.39
ASE-105A	1048.17	1049.61	1.44

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TABLE 2-2 Comparison between September 2006 and December 2006 Water Level Elevations Fourth Quarter Status Report, Honeywell 34th Street Facility, Phoenix, Arizona

	Groundwate			
Location ID	9/06/2006 (ft amsl)	12/06/2006 (ft amsl)	Difference (feet)	
ASE-106A	1046.11	1046.71	0.60	
ASE-107A	1047.40	1048.09	0.69	
ASE-108A	1047.13	1048.20	1.07	
ASE-109A	1048.68	1049.14	0.46	
ASE-110A	1047.12	1047.26	0.14	
ASE-111A	1056.84	1058.29	1.45	
ASE-112A	1048.18	1049.72	1.54	
ASE-113A	1048.70	1049.53	0.83	
ASE-114A	1047.95	1048.68	0.73	
ASE-115A	1056.95	1058.39	1.44	
ASE-116A	1056.65	1058.09	1.44	
ASE-122A	1049.68	1050.42	0.74	
ASE-123A	1050.10	1050.69	0.59	
ASE-124A	1037.46	1037.95	0.49	
ASE-125A	1033.37	1033.95	0.58	
ASE-126A	1035.13	1035.97	0.84	
ASE-127A	1054.25	1055.93	1.68	
ASE-128A	1041.33	1041.52	0.19	
BC-7A	1055.23	1056.54	1.31	
BC-8B	1046.66	1047.64	0.98	
PL-101A	1056.74	1058.16	1.42	
PL-105A	1047.37	1048.49	1.12	
PL-201A	1048.58	1049.71	1.13	
PL-2101	1051.67	1052.86	1.19	
PL-2102	1051.58	1052.69	1.11	

#### Notes:

Difference column calculated by subtracting September 2006 water level elevation from December 2006 water level elevation. Positive result indicates higher water level elevation in December signifying a rising water table over the reporting period.

ft amsl-Feet above mean sea level.

NM-Water level elevation not measured.

NA-Not applicable; difference cannot be calculated.

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TABLE 2-3
Non-fuel Volatile Organic Compound List
Fourth Quarter Status Report, Honeywell 34th Street Facility, Phoenix, Arizona

Soil Vapor	Groundwater	Soil
1,1,1-Trichloroethane	1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,1-Trichloroethane
1,1,2-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane
1,1,2-Trichlorotrifluoroethane	1,1,2-Trichloroethane	1,1,2-Trichloroethane
1,1-Dichloroethane	1,1,2-Trichlorotrifluoroethane	1,1,2-Trichlorotrifluoroethane
1,1-Dichloroethene	1,1-Dichloroethane	1,1-Dichloroethane
1,2-Dichlorobenzene	1,1-Dichloroethene	1,1-Dichloroethene
1,2-Dichloropropane	1,1-Dichloropropene	1,1-Dichloropropene
1,2-Dichlorotetrafluoroethane	1,2,3-Trichloropropane	1,2,3-Trichloropropane
1,3-Butadiene	1,2-Dibromo-3-Chloropropane	1,2-Dibromo-3-Chloropropane
1,3-Dichlorobenzene	1,2-Dichlorobenzene	1,2-Dichlorobenzene
1,4-Dichlorobenzene	1,2-Dichloropropane	1,2-Dichloropropane
2-Butanone	1,3-Dichlorobenzene	1,3-Dichlorobenzene
2-Hexanone	1,3-Dichloropropane	1,3-Dichloropropane
4-Methyl-2-Pentanone	1,4-Dichlorobenzene	1,4-Dichlorobenzene
Acetone	2,2-Dichloropropane	2,2-Dichloropropane
Allyl Chloride	2-Butanone	2-Butanone
Bromodichloromethane	2-Hexanone	2-Chloroethyl Vinyl Ether
Bromoethene	4-Methyl-2-Pentanone	2-Hexanone
Bromoform	Acetone	4-Methyl-2-Pentanone
Bromomethane	Bromochloromethane	Acetone
Carbon Disulfide	Bromodichloromethane	Bromochloromethane
Carbon Tetrachloride	Bromoform	Bromodichloromethane
Chlorobenzene	Bromomethane	Bromoform
Chlorodibromomethane	Carbon Disulfide	Bromomethane
Chloroethane	Carbon Tetrachloride	Carbon Disulfide
Chloroform	Chlorobenzene	Carbon Tetrachloride
Chloromethane	Chlorodibromomethane	Chlorobenzene
cis-1,2-Dichloroethene	Chloroethane	Chlorodibromomethane
cis-1,3-Dichloropropene	Chloroform	Chloroethane
Cyclohexane	Chloromethane	Chloroform
Dichlorodifluoromethane	cis-1,2-Dichloroethene	Chloromethane
Ethyl Acetate	cis-1,3-Dichloropropene	cis-1,2-Dichloroethene
Hexachlorobutadiene	Dibromomethane	cis-1,3-Dichloropropene

TABLE 2-3
Non-fuel Volatile Organic Compound List
Fourth Quarter Status Report, Honeywell 34th Street Facility, Phoenix, Arizona

Soil Vapor	Groundwater	Soil
Isopropanol	Dichlorodifluoromethane	Dibromomethane
Methylene Chloride	Hexachlorobutadiene	Dichlorodifluoromethane
Propylene	Iodomethane	Hexachlorobutadiene
Tetrachloroethene	Methylene Chloride	lodomethane
Tetrahydrofuran	Styrene	Methylene Chloride
trans-1,2-Dichloroethene	Tetrachloroethene	Styrene
trans-1,3-Dichloropropene	trans-1,2-Dichloroethene	Tetrachloroethene
Trichloroethene	trans-1,3-Dichloropropene	trans-1,2-Dichloroethene
Trichlorofluoromethane	Trichloroethene	trans-1,3-Dichloropropene
Vinyl Acetate	Trichlorofluoromethane	Trichloroethene
Vinyl Chloride	Vinyl Acetate	Trichlorofluoromethane
	Vinyl Chloride	Vinyl Acetate
		Vinyl Chloride

TABLE 3-1 Summary of Free-product Recovery Fourth Quarter Status Report, Honeywell 34th Street Facility, Phoenix, Arizona

Well	Gallons Recovered during Fourth Quarter 2006	Total Gallons Recovered via Skimming through Fourth Quarter 2006
ASE-19A	0	49.5
ASE-20A	0	4,103.8
ASE-37A	0	1.8
ASE-38A	0	46.9
ASE-39A	0	0.7
ASE-41A	0	27.3
ASE-51A	0	105.0
ASE-52A	0	19.5
ASE-53A	0	481.1
ASE-55A	0	3.1
ASE-56A	0	663.0
ASE-57A	0	685.2
ASE-63A	0	0.0
ASE-64A	0	31.6
ASE-67A	20.7	295.5
ASE-68A	0	74.7
ASE-89A	0	139.1
ASE-90A	0	6.7
ASE-91A	0	0.0
ASE-92A	0	0.0
ASE-96A	0	1.0
ASE-102A	0	146.5
ASE-107A	2.3	5.2
ASE-111A	0	4.1
ASE-113A	0	0.0
ASE-114A	0	0.0
ASE-115A	0	0.2
PL-101A	0	291.0
PL-105A	0	5.5
PL-2101	0	0.02
Total	23	7188

This table includes all wells that have historically had measurable free product.

Rounding may affect totals shown in far right column and totals at bottom of table.

TABLE 3-2
Sky Harbor International Airport Subsurface Utility Vaults Field Parameter Results, Fourth Quarter 2006
Fourth Quarter Status Report, Honeywell 34th Street Facility, Phoenix, Arizona

Fourth Quarter Status I			LEL-WO	METHANE-WO	CO <sub>2</sub> -WO	O <sub>2</sub> -WO
Vault Location ID	Date	Time	(% V/V)	(% V/V)	(% V/V)	(% V/V)
ELE-VLT-01	10/10/06	7:10	0.0	0.0	0.1	20.7
ELE-VLT-01	11/09/06	11:57	0.0	0.0	0.0	20.7
ELE-VLT-01	12/15/06	7:14	0.0	0.0	0.0	21.0
ELE-VLT-02	10/10/06	7:12	0.0	0.0	0.1	20.9
ELE-VLT-02	11/09/06	12:00	0.0	0.0	0.2	20.3
ELE-VLT-02	12/15/06	7:16	0.0	0.0	0.0	21.1
ELE-VLT-03	10/10/06	7:18	0.0	0.0	0.0	20.9
ELE-VLT-03	11/09/06	12:04	0.0	0.0	0.2	20.5
ELE-VLT-03	12/15/06	7:20	0.0	0.0	0.3	20.5
ELE-VLT-04	10/10/06	7:20	0.0	0.0	0.0	20.9
ELE-VLT-04	11/09/06	12:06	0.0	0.0	0.2	20.4
ELE-VLT-04	12/15/06	7:22	0.0	0.0	0.0	21.0
ELE-VLT-05	10/10/06	7:22	0.0	0.0	0.0	20.8
ELE-VLT-05	11/09/06	12:08	0.0	0.0	0.2	20.2
ELE-VLT-05	12/15/06	7:24	0.0	0.0	0.0	20.9
ELE-VLT-06	10/10/06	7:24	0.0	0.0	0.1	20.9
ELE-VLT-06	11/09/06	12:10	0.0	0.0	0.4	19.7
ELE-VLT-06	12/15/06	7:26	0.0	0.0	0.3	20.2
ELE-VLT-07	10/10/06	7:26	0.0	0.0	0.0	20.8
ELE-VLT-07	11/09/06	12:12	0.0	0.0	0.0	20.5
ELE-VLT-07	12/15/06	7:28	0.0	0.0	0.0	20.8
ELE-VLT-08	10/10/06	7:28	0.0	0.0	0.0	20.8
ELE-VLT-08	11/09/06	12:14	0.0	0.0	0.0	20.5
ELE-VLT-08	12/15/06	7:30	0.0	0.0	0.0	21.0
ELE-VLT-09	10/10/06	7:29	0.0	0.0	0.0	20.7
ELE-VLT-09	11/09/06	12:15	0.0	0.0	0.0	20.5
ELE-VLT-09	12/15/06	7:31	0.0	0.0	0.0	20.9
ELE-VLT-10	10/10/06	7:32	0.0	0.0	0.0	20.9
ELE-VLT-10	11/09/06	12:18	0.0	0.0	0.0	20.5
ELE-VLT-10	12/15/06	7:34	0.0	0.0	0.0	21.0
FBO-VLT-01	10/10/06	7:14	0.0	0.0	0.1	20.7
FBO-VLT-01	11/09/06	12:01	0.0	0.0	0.1	20.6
FBO-VLT-01	12/15/06	7:17	0.0	0.0	0.3	20.4
FBO-VLT-02	10/10/06	7:17	0.0	0.0	0.1	20.7
FBO-VLT-02	11/09/06	12:03	0.0	0.0	0.1	20.7
FBO-VLT-02	12/15/06	7:19	0.0	0.0	0.1	20.9
FBO-VLT-03	10/10/06	7:31	0.0	0.0	0.0	20.8
FBO-VLT-03	11/09/06	12:17	0.0	0.0	0.0	20.4
FBO-VLT-03	12/15/06	7:33	0.0	0.0	0.0	21.0

TABLE 3-2 Sky Harbor International Airport Subsurface Utility Vaults Field Parameter Results, Fourth Quarter 2006 Fourth Quarter Status Report, Honeywell 34th Street Facility, Phoenix, Arizona

			LEL-WO	METHANE-WO	CO <sub>2</sub> -WO	O <sub>2</sub> -WO
Vault Location ID	Date	Time	(% V/V)	(% V/V)	(% V/V)	(% V/V)

 $CO_2$  = carbon dioxide.

ELE = airport electrical vaults.

FBO = Federal Aviation Administration fiber optic vaults.

LEL = lower explosive limit.

 $O_2$  = oxygen.

-W = measurement taken with a carbon filter.

-WO = measurement taken without a carbon filter.

% V/V = percent volume per volume.

TABLE 3-3
Well Dilution Test Field Measurement Data, Fourth Quarter 2006
Fourth Quarter Status Report, Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Date	O <sub>2</sub> -W (% V/V)	O <sub>2</sub> -WO (% V/V)	CO <sub>2</sub> -W (% V/V)	CO₂ -WO (% V/V)	Methane -W (% V/V)	Methane -WO (% V/V)	% LEL -W (% V/V)	% LEL -WO (% V/V)	Helium (% V/V)	Static Wellhead Pressure (inches H <sub>2</sub> O)
BC-18	60	80	10/05/2006	-	10.4	-	4.9	0	0	0	0	0	0.040
ASE-111A <sup>a</sup>	59.5	124.5	10/05/2006	-	0	-	14.7	>100	>100	>100	>100	NA	0.150
ASE-111A	59.5	124.5	10/10/2006	-	0	-	17.6	68.6	>100	>100	>100	NA	0.090
P-14-U	12	17	10/10/2006	-	20.5	-	0	0	0	0	0	0	0.010
ASE-20A	61	81	10/10/2006	-	0	-	12.5	5	87	>100	>100	NA	0.030
P-21-L	53	63	10/10/2006	-	0	-	14.1	5.8	96	>100	>100	NA	0.070
P-17-M	38	43	10/18/2006	0	0	13.9	14	3.5	6	69	>100	NA	-0.020
P-17-U	20	25	11/14/2006	8.8	-	11	-	0	-	0	-	0	-0.010
P-17-M	38	43	11/14/2006	0	-	13.1	-	10.5	-	>100	-	0.44	0.000
P-21-U	15	20	11/14/2006	15.8	-	2.4	-	0.2	-	4	-	0	0.010
P-23-U	16	21	11/14/2006	9.9	-	4.9	-	0	-	0	-	0	0.010
P-28-U	6	11	11/15/2006	7.4	-	7.3	-	0	-	0	-	0	0.000
P-28-M	43	48	11/15/2006	1.8	-	7.4	-	0	-	0	-	0	0.000
P-28-L	58	78	11/15/2006	4.9	-	5.9	-	0.1	-	1	-	0	0.010
P-47	6	11	11/15/2006	16.2	-	3.1	-	0	-	0	-	0	0.010

<sup>a</sup>Test incomplete due to carbon breakthrough

 $CO_2$  = carbon dioxide

ft bgs = feet below ground surface

H<sub>2</sub>O - water

 $O_2$  = oxygen

TABLE 3-3
Well Dilution Test Field Measurement Data, Fourth Quarter 2006
Fourth Quarter Status Report, Honeywell 34th Street Facility, Phoenix, Arizona

	•	Bottom											
	Top of	of		$O_2$	$O_2$	CO <sub>2</sub>	CO <sub>2</sub>	Methane	Methane	% LEL	% LEL		Static Wellhead
Location	Screen	Screen		-W	-WO	-W	-WO	-W	-WO	-W	-WO	Helium	Pressure
ID	(ft bgs)	(ft bgs)	Date	(% V/V)	(% V/V)	(% V/V)	(% V/V)	(% V/V)	(% V/V)	(% V/V)	(% V/V)	(% V/V)	(inches H <sub>2</sub> O)

% LEL = percent lower explosive limit

% V/V = percent volume per volume

NR = Not recorded

NA = Not applicable; Helium test was not conducted because the oxygen was less than or equal to 0.05%

-W = measurement taken with a carbon filter

-WO = measurement taken without a carbon filter

> = greater than

TABLE 3-4
Monitor Well P-17-M Long-Term Test Field Results, November, 2006
Fourth Quarter Status Report, Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Date	Time	O2-W (% V/V)	CO2-W (% V/V)	Methane-W (% V/V)	Methane-WO (% V/V)
P-17-M	38	43	11/27/2006	16:44	0.0	13.8	15.1	48.5
P-17-M	38	43	11/27/2006	19:09	0.0	15.1	6.5	13.5
P-17-M	38	43	11/27/2006	23:22	0.0	15.4	6.0	13.8
P-17-M	38	43	11/28/2006	3:20	0.0	15.5	6.2	11.0
P-17-M	38	43	11/28/2006	5:24	0.0	15.7	6.1	11.9
P-17-M	38	43	11/28/2006	6:04	0.0	15.7	5.6	11.4
P-17-M	38	43	11/28/2006	9:10	0.0	14.3	5.2	7.8
P-17-M	38	43	11/28/2006	10:30	0.0	13.2	5.1	14.4
P-17-M	38	43	11/28/2006	11:56	0.0	11.7	13.8	-

<sup>-</sup>W = measurement taken with a carbon filter

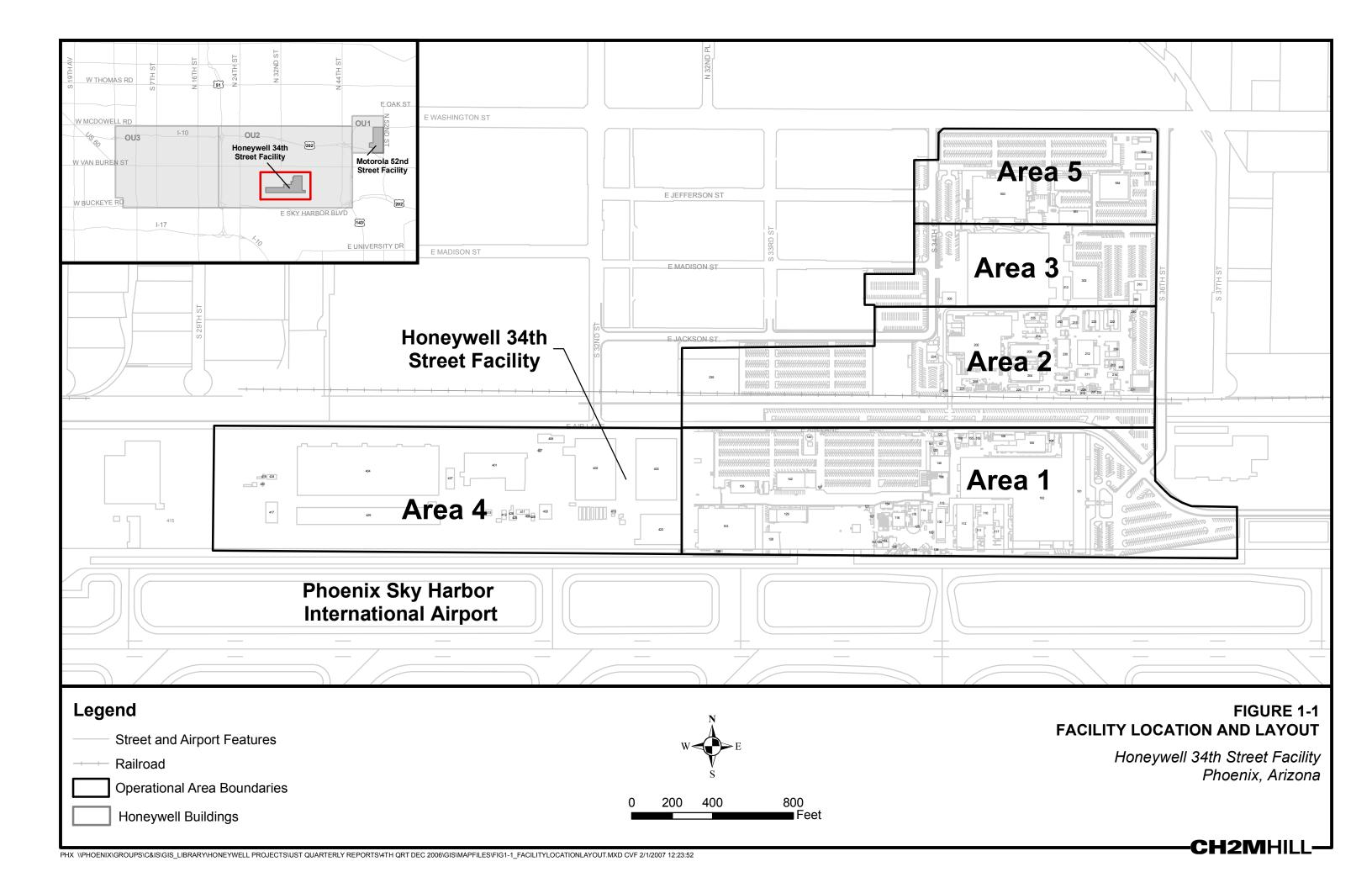
<sup>-</sup>WO = measurement taken without a carbon filter

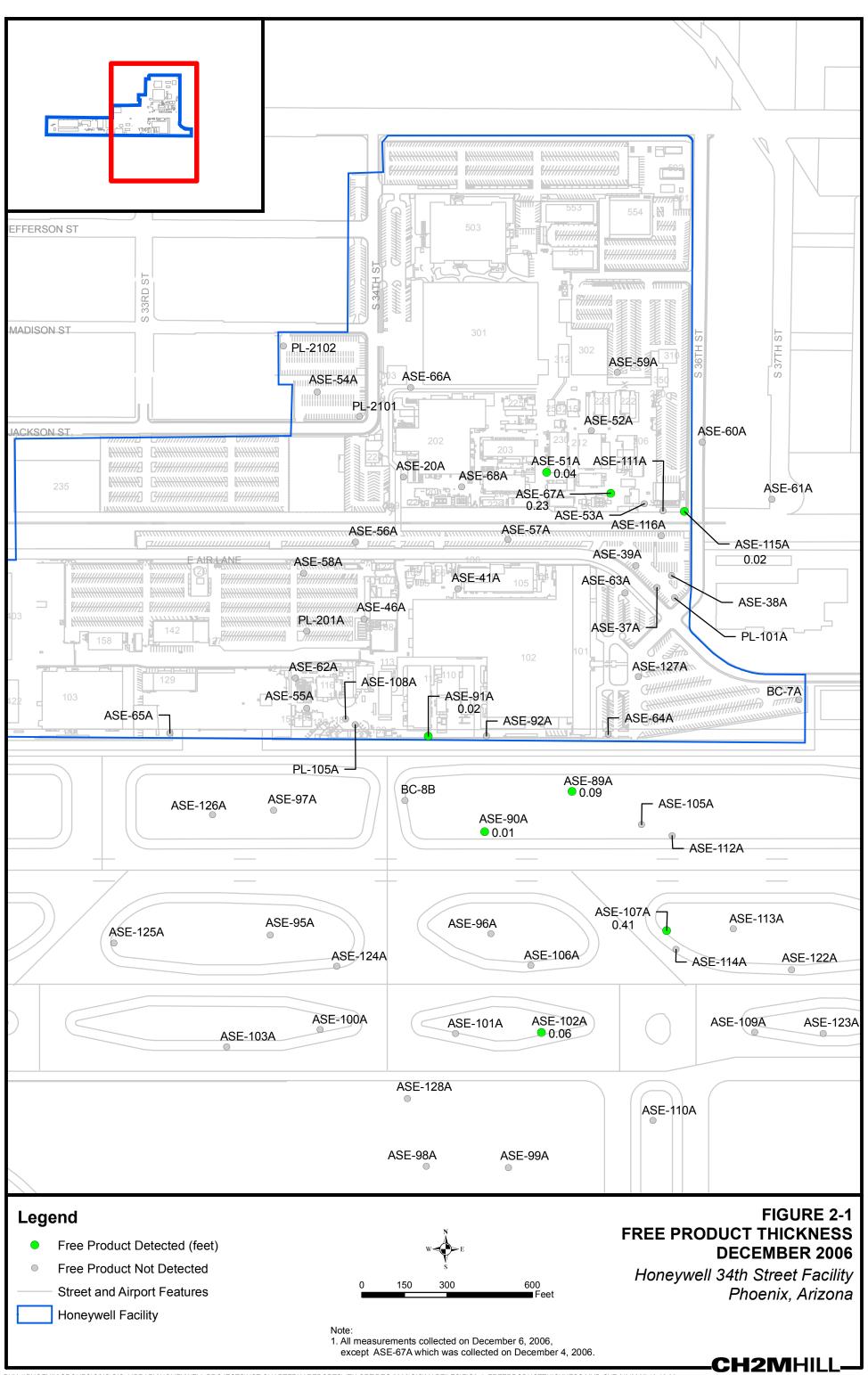
ft bgs = feet below ground surface

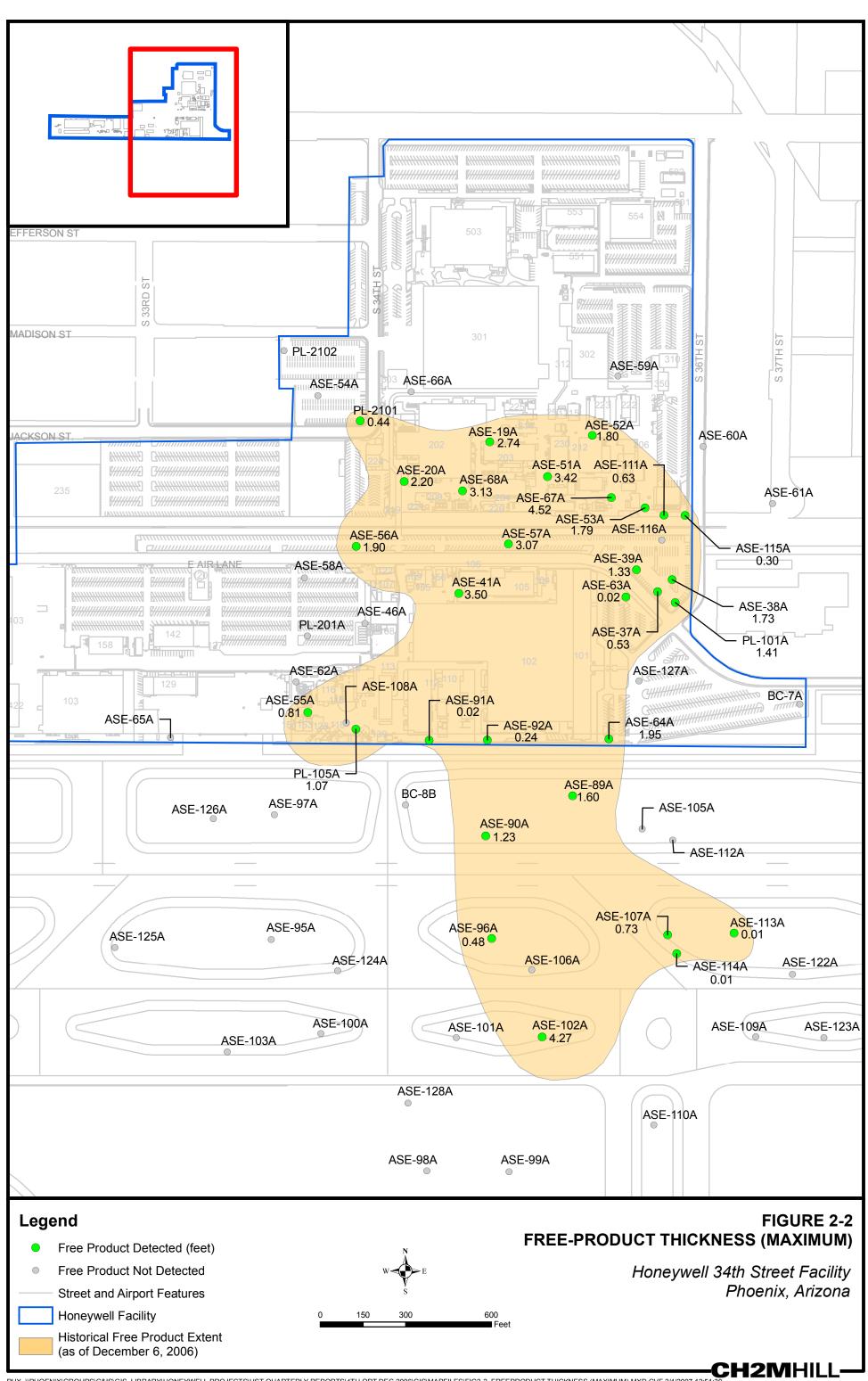
<sup>( - ) =</sup> data not recorded

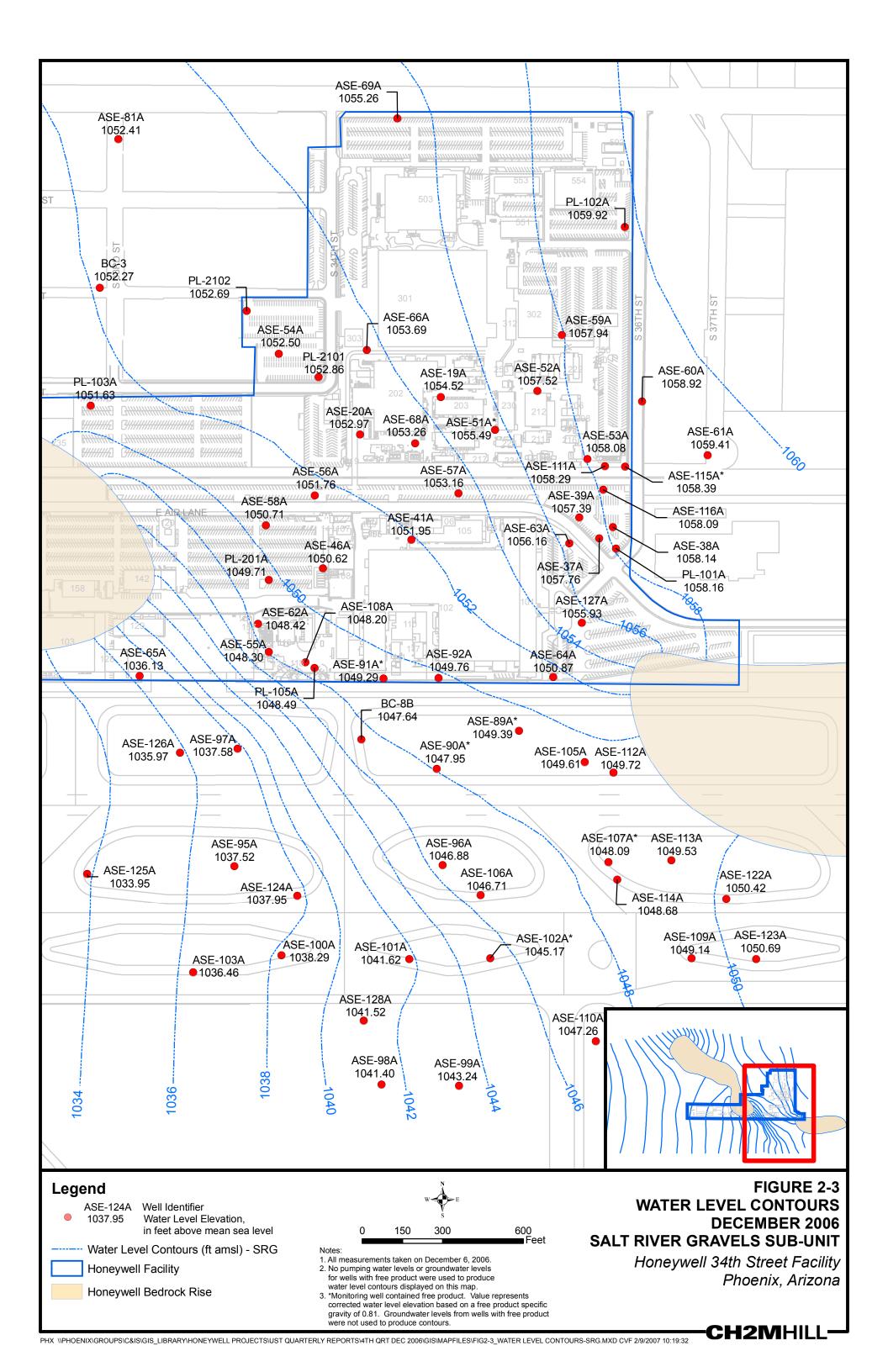
<sup>%</sup>V/V = percent volume per volume

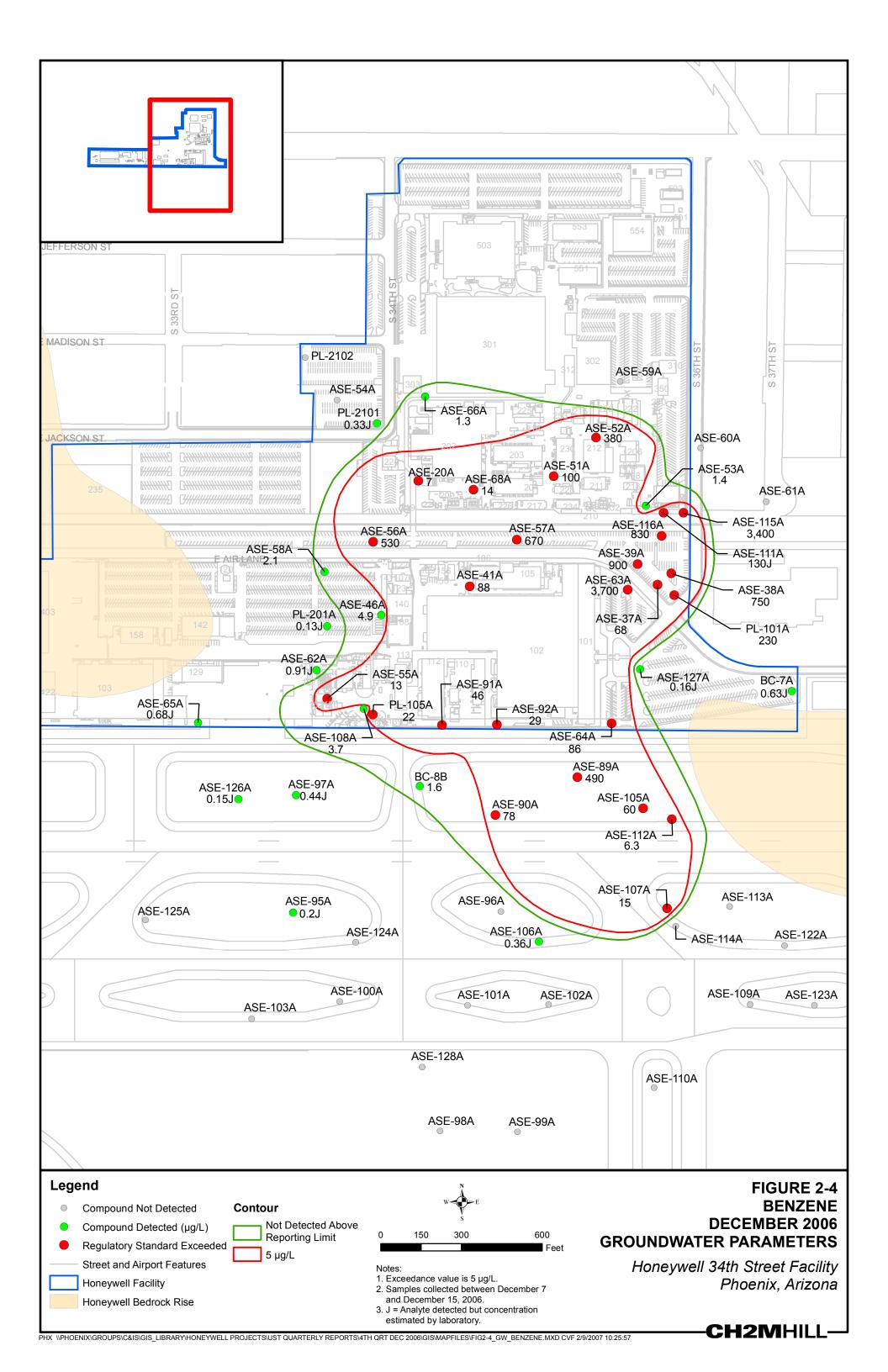


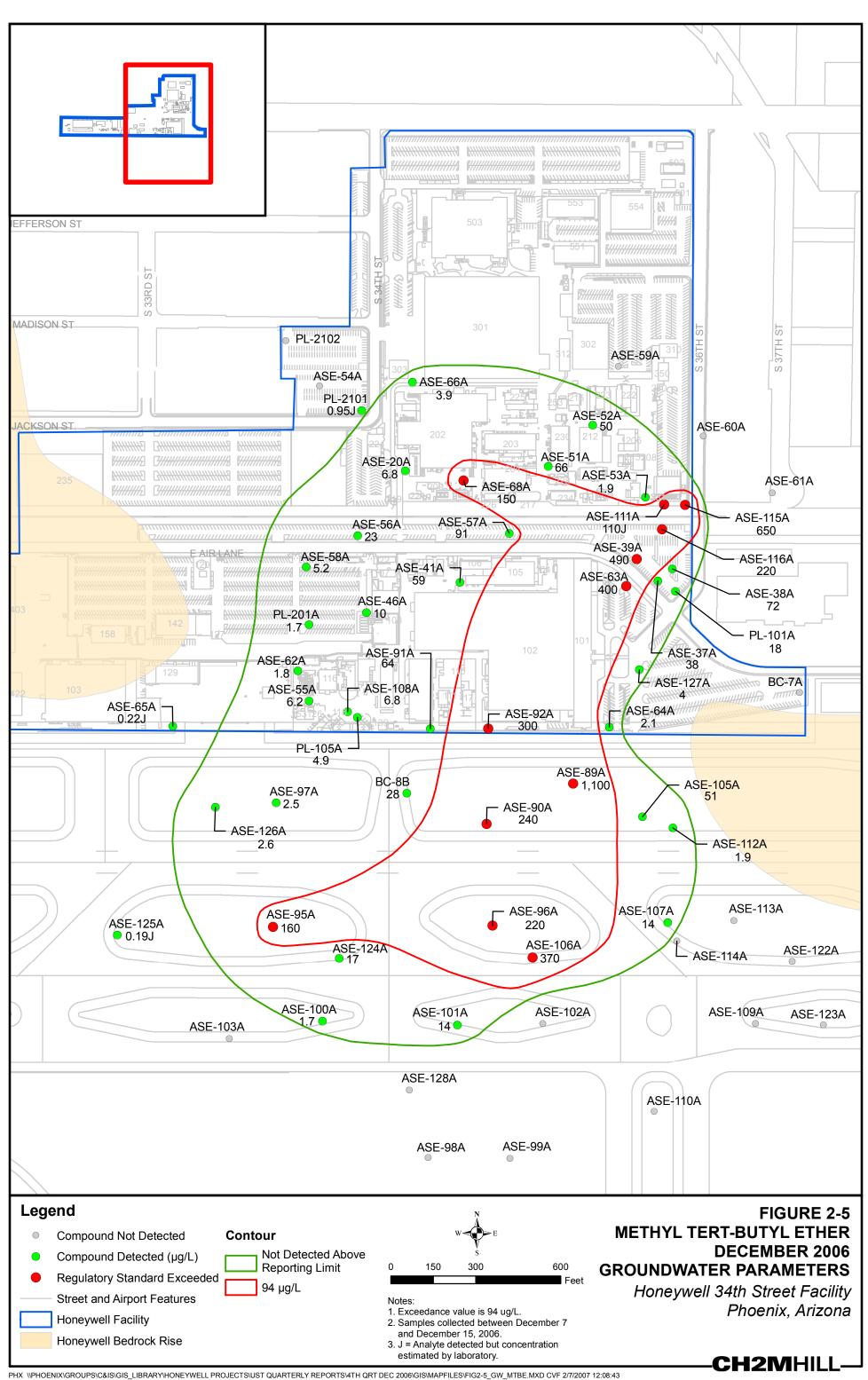


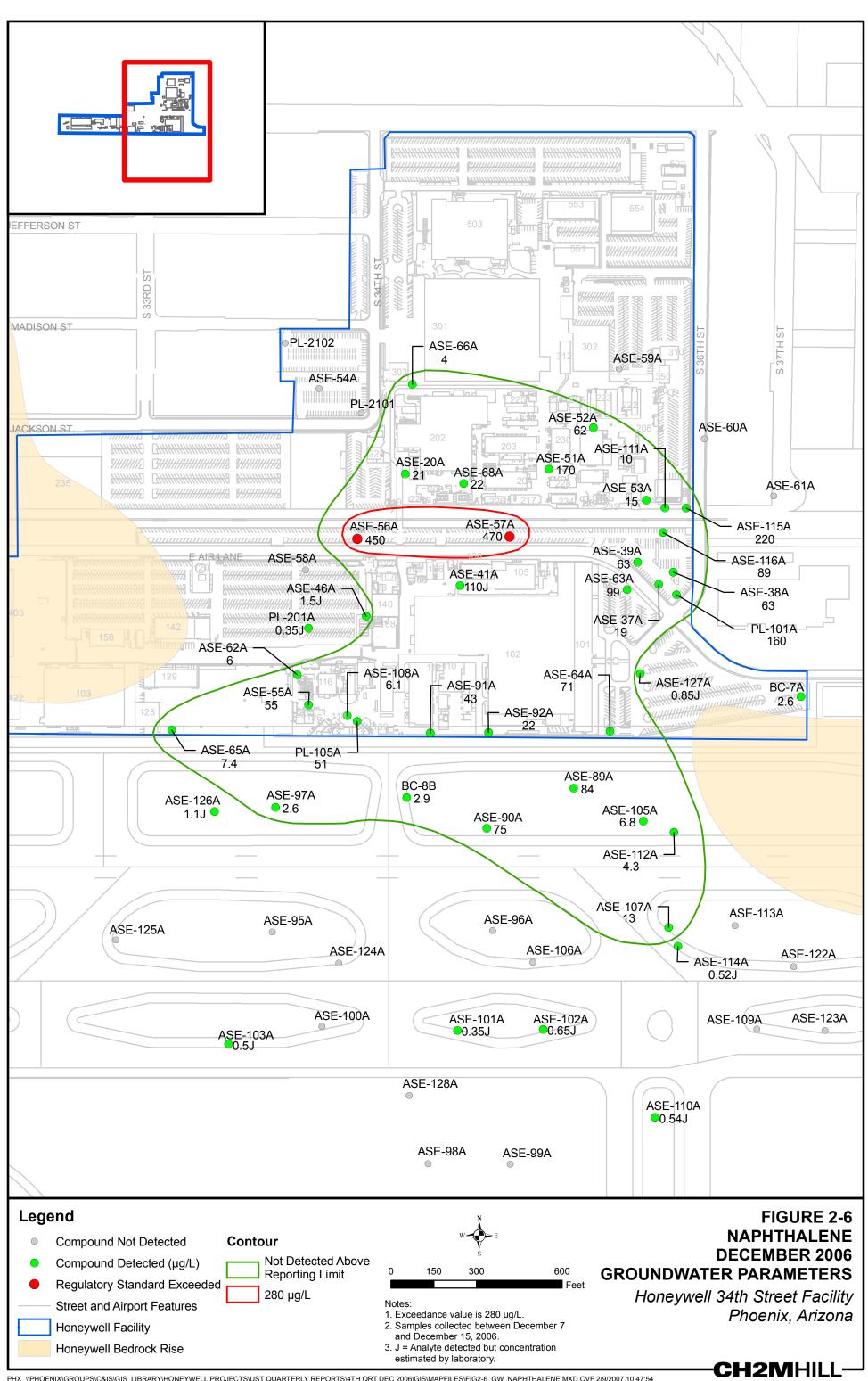


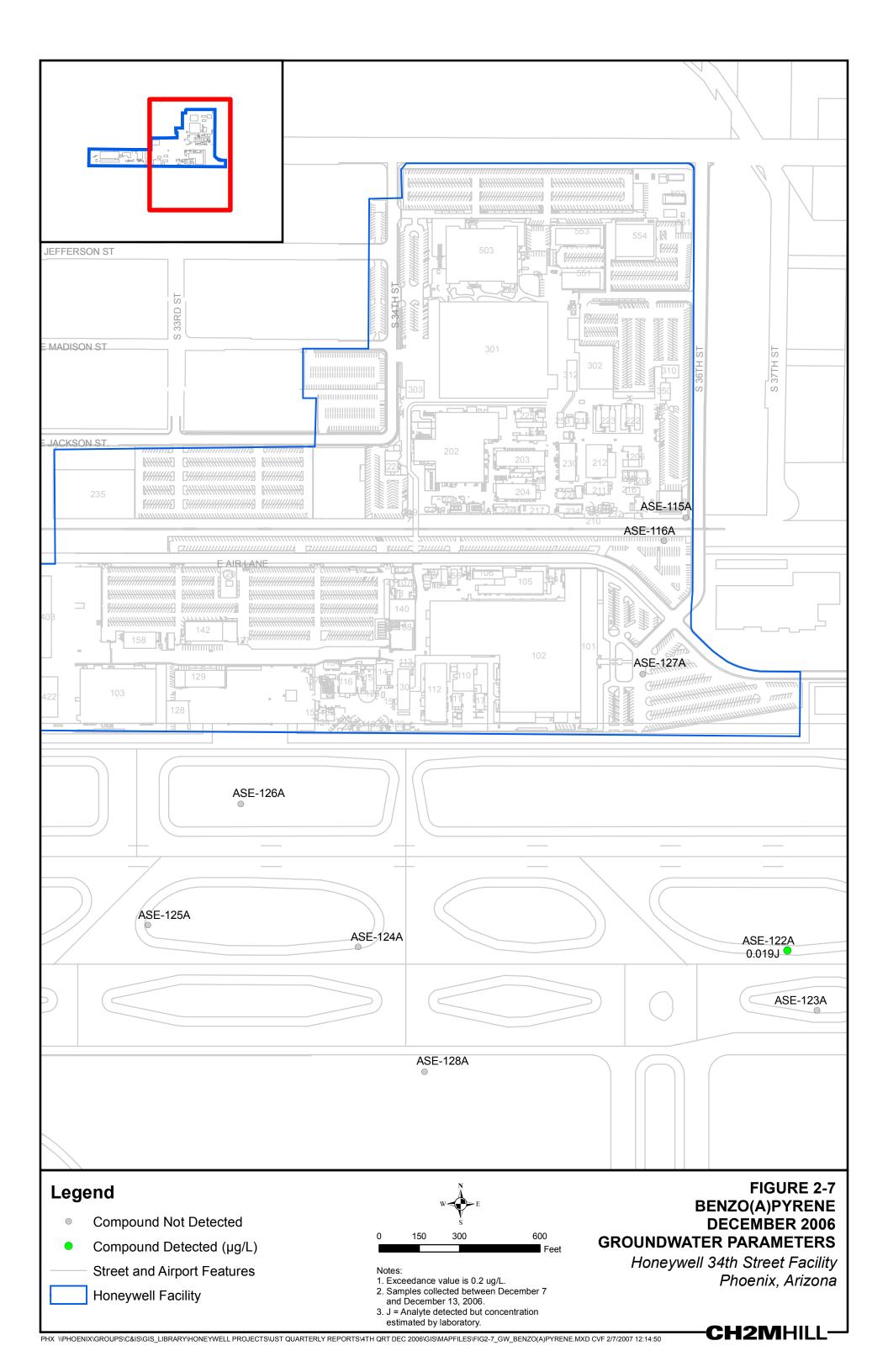


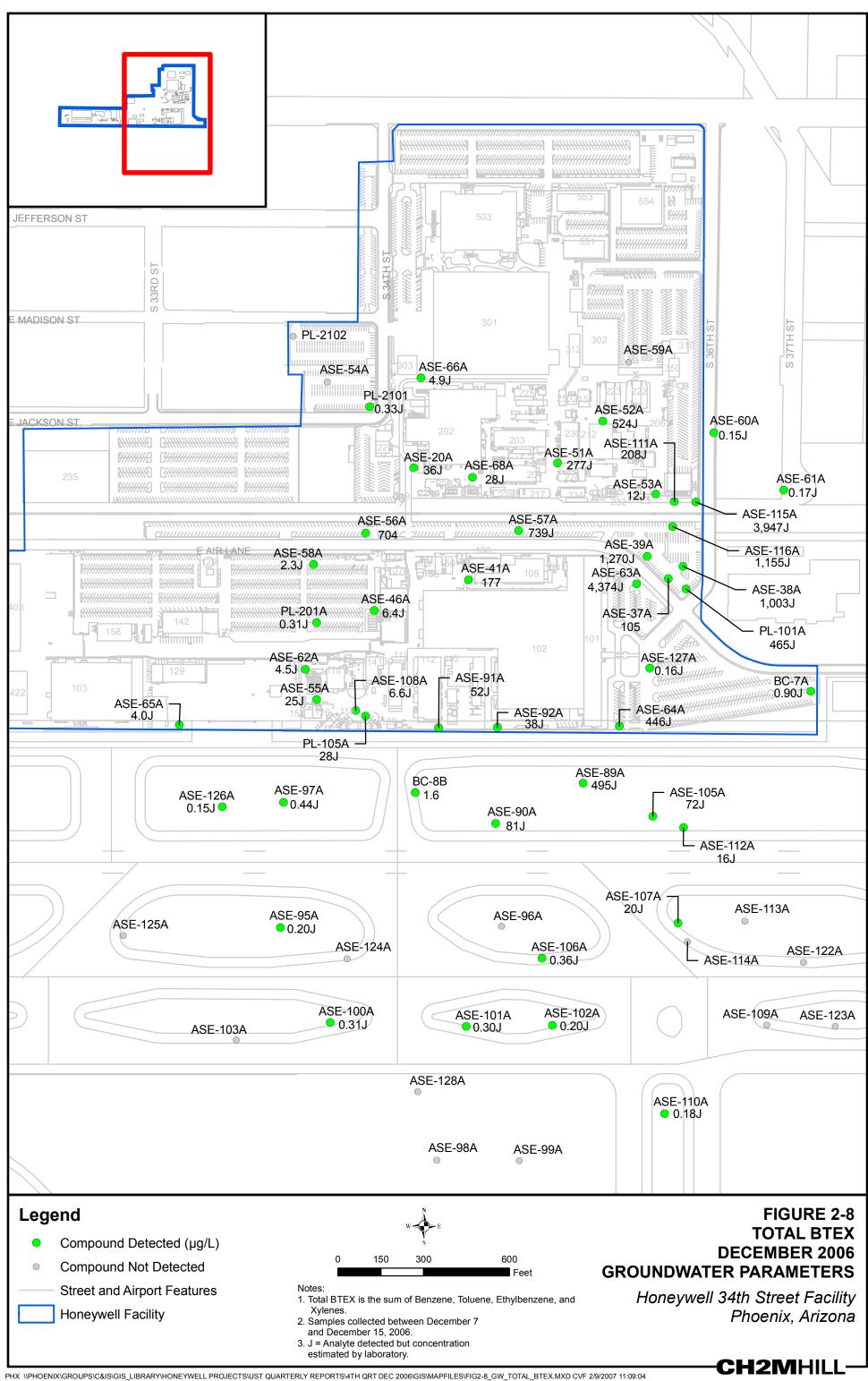


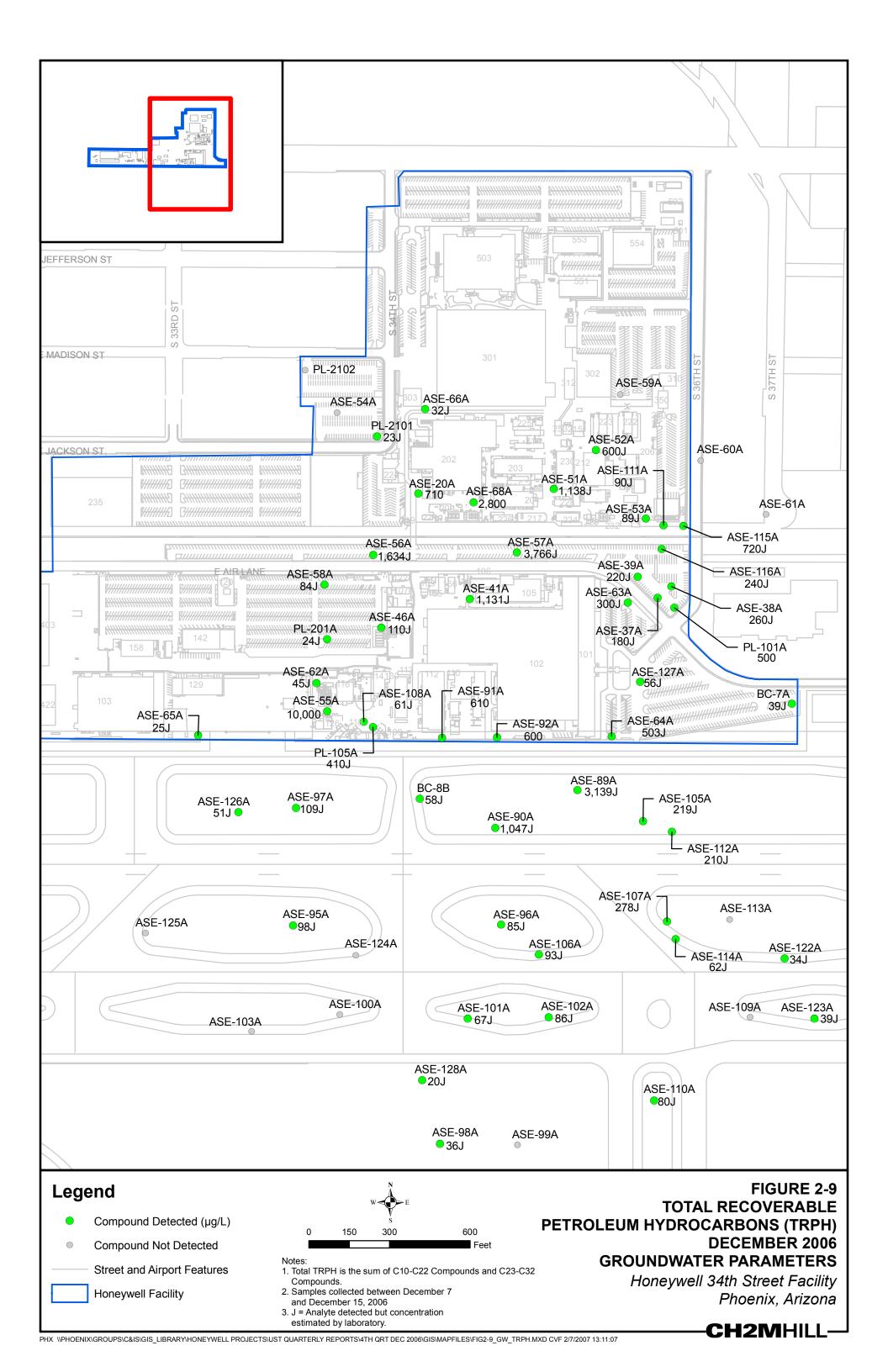


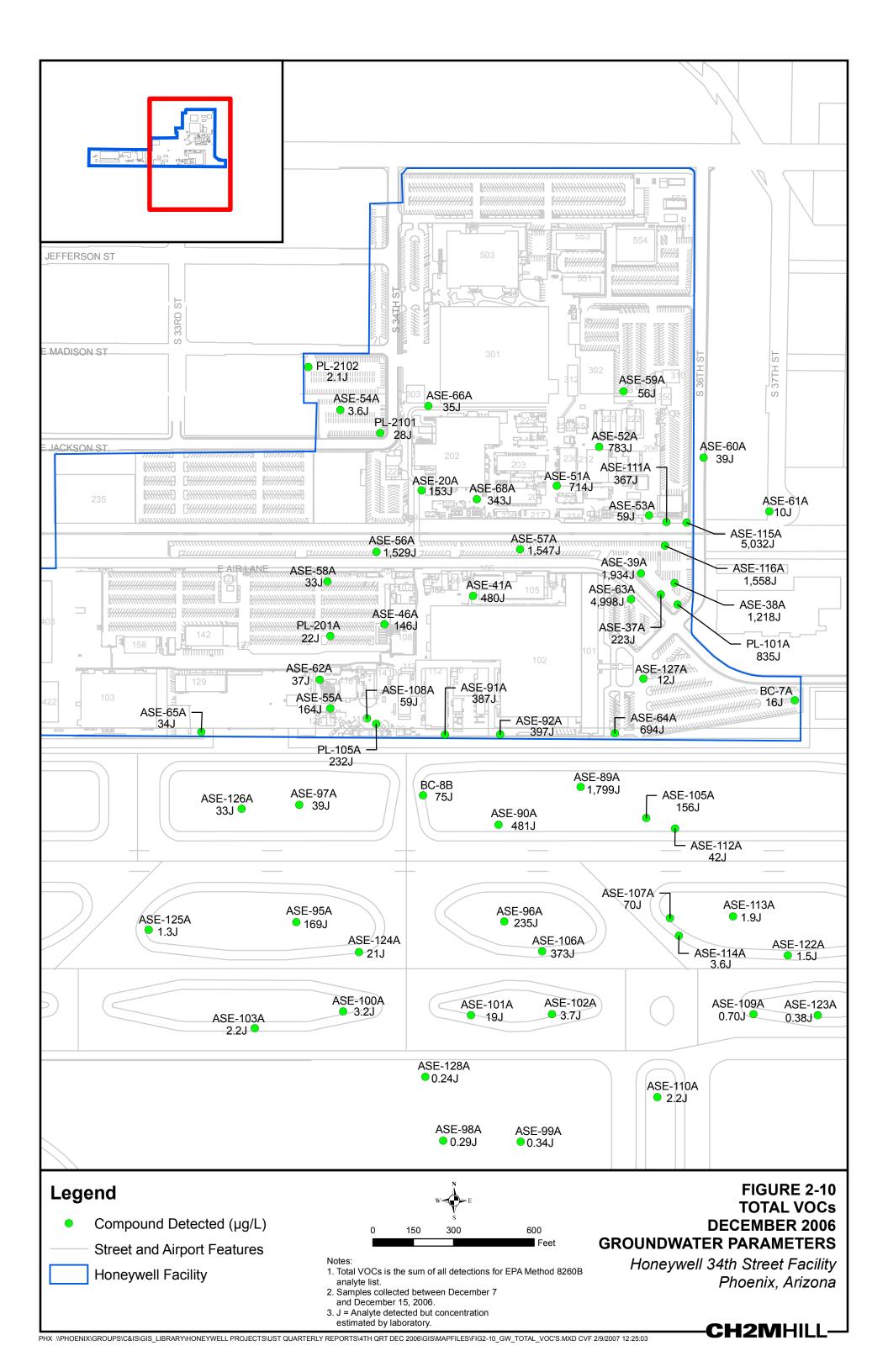


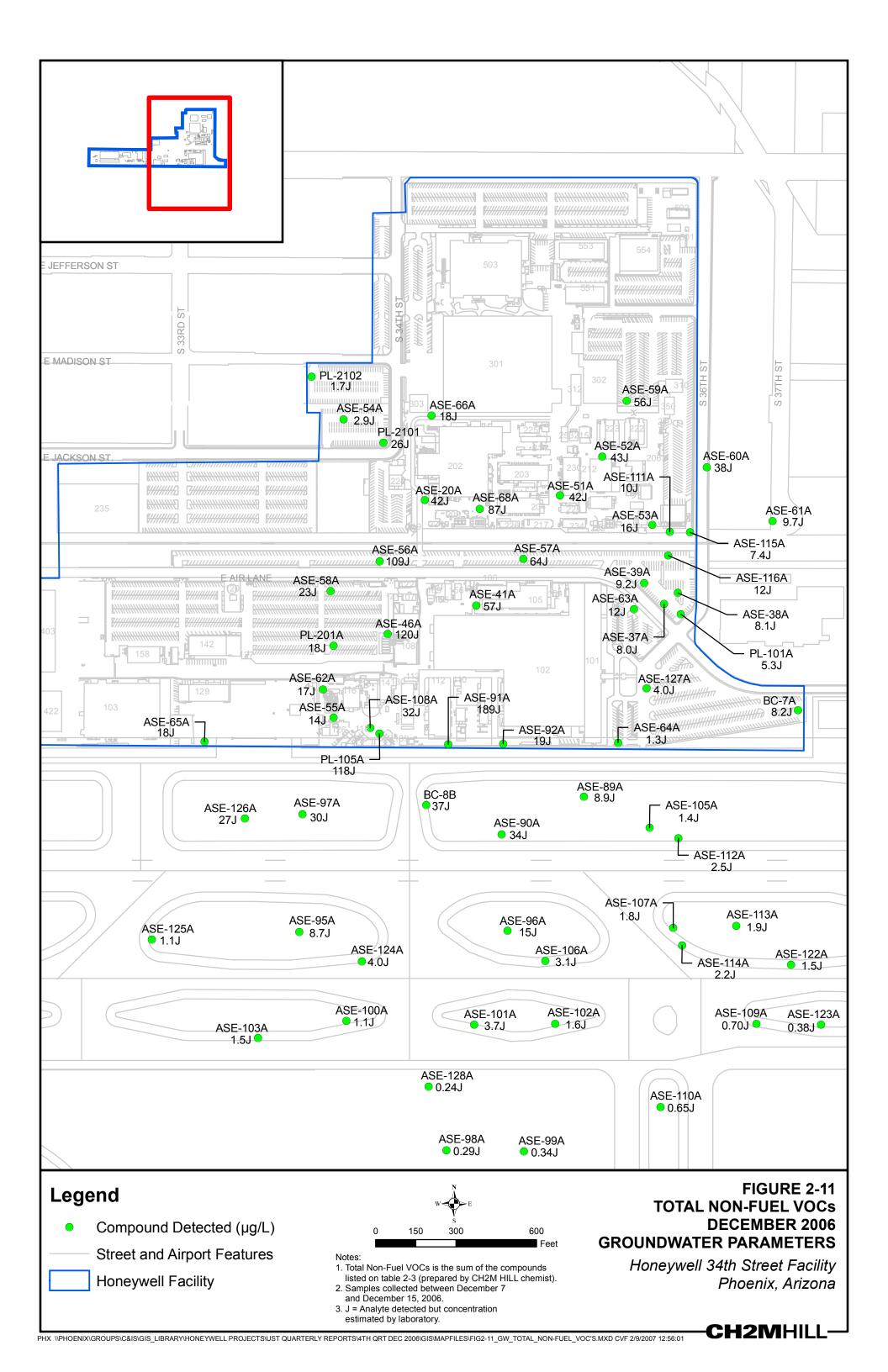


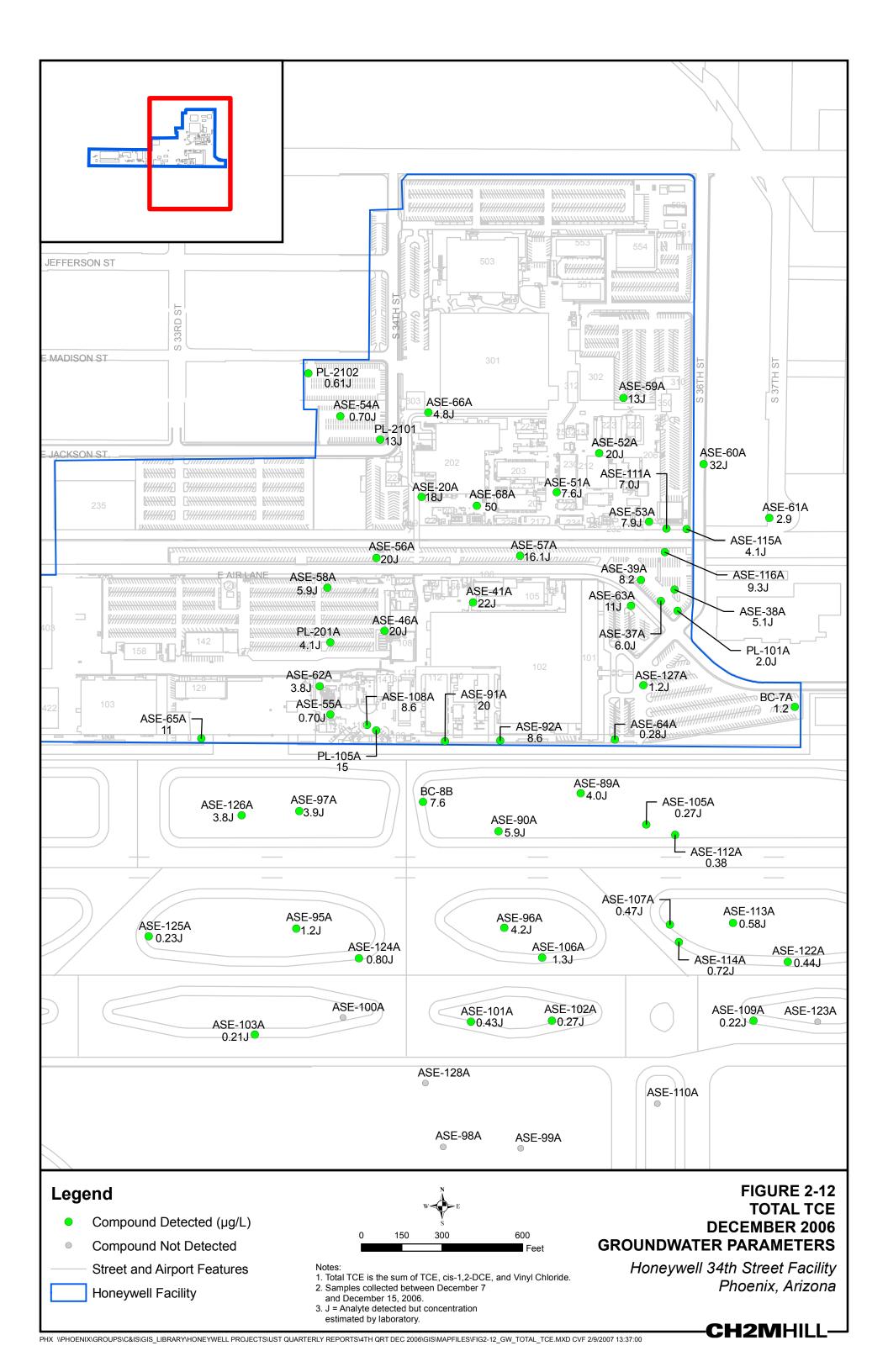


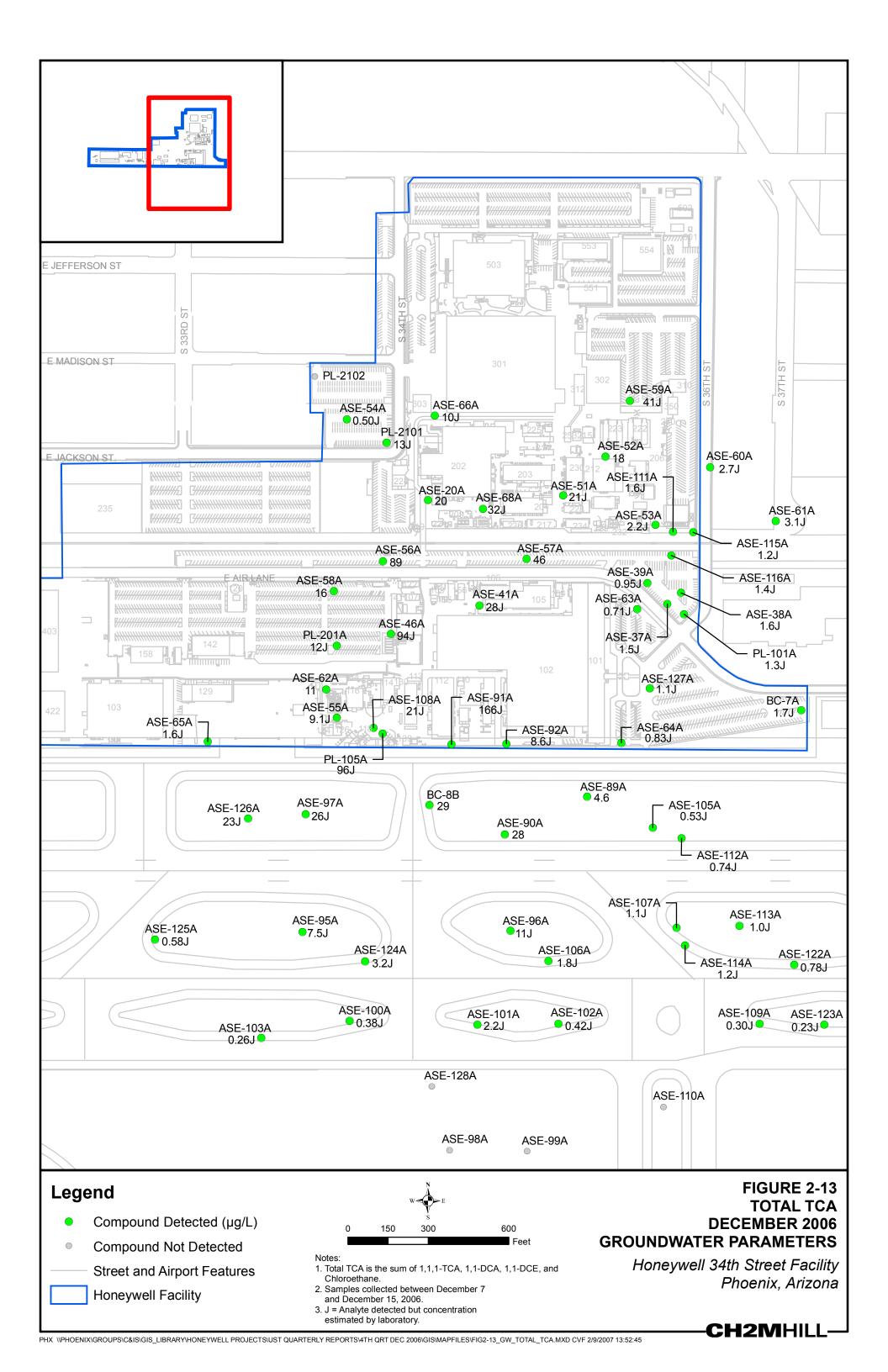


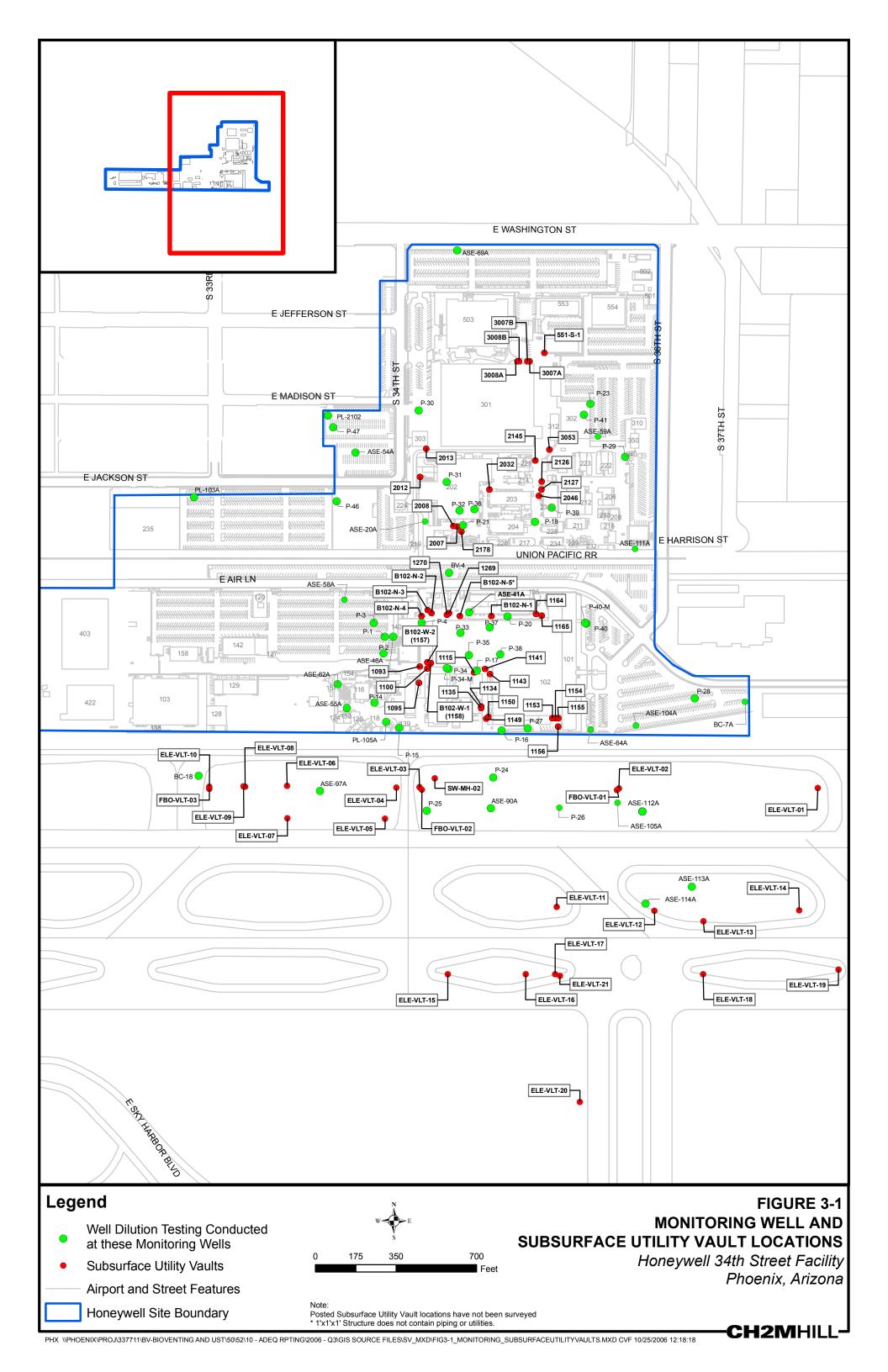












Appendix A Free Product Sample Letter Report and Laboratory Analytical Reports



2014 CAROL DRIVE WILMINGTON, DE 1980B

(302) 992-9737 FAX (302) 992-9978

EMAIL dshepperd@trilliuminc.com www.trilliuminc.com

February 13, 2007

Mr. Phil Burke CH2M Hill 2625 S. Plaza Drive Suite 300 Tempe, AZ 85282-3397

RE: Fuel Content of Free Product Sample from Well ASE-107A

Dear Mr. Burke:

Enclosed please find the data that illustrate the composition of the LNAPL sample collected from monitor well ASE-107A on November 2, 2006.

The chromatogram for the sample is consistent with a combination of Jet A and JP-4 fuels. Estimated percentages of each fuel in the free product sample were calculated from the "fingerprint" chromatogram as described below.

Trillium obtained commercial standards for JetA and JP-4 from Supelco in 1999. These were analyzed under the same analytical conditions used to fingerprint the LNAPL samples (chromatograms for both standards are included in Attachment A). From these standard chromatograms, Trillium determined a way to estimate fuel percentages in the LNAPLs based on the response obtained. The total area of the chromatogram in three different retention time (RT) ranges was integrated using the instrument software. Based on the standards, these three ranges were representative of the clution time ranges specific to each of the fuel types and a middle range where

Phil Burke February 13, 2007 Page 2



overlap of the fuels occurs. Ranges were established using the retention times of normal paraffins (straight chain or n-alkanes) to compensate for any drift in instrument performance over time.

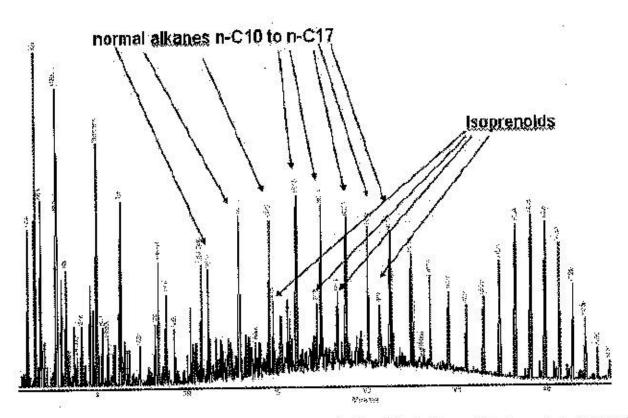
The first range of the chromatogram starts with butane and continues to a point half-way between the RTs for heptane and octane. The second range begins where the first range ends and extends to a point half-way between RTs for undecane and dodecane. The last range begins where the second range ends and extends to a point half-way between RTs for hetadecane and octadecane. The first range was assigned to JP-4 and the third range to JetA. The response from the middle range was divided equally between JP-4 and JetA.

In July of 2005, a sample of JP-4 from an on-site tank was submitted to Trillium as a laboratory blind sample identified as Well ASE-111B. Analysis of this fuel showed a much higher second and third range response than the commercial JP-4 standard that had been relied upon previously (chromatogram for ASE-111B is included in Attachment A). Because this on-site "standard" should be more representative of any JP-4 component in a LNAPL from the site, Trillium adjusted the method for estimating the fuel percentages accordingly. The JP-4 was described to Trillium as a 50:50 mixture of gasoline and kerosene, therefore, it was assumed that for every one percent of JP-4 identified in a LNAPL sample, one percent of kerosene (JetA) would, by definition, have to be present also. On this basis the method for estimating fuels was adjusted to reflect this new information, in effect doubling the JP-4 content and lowering the JetA content.

When hydrocarbon fuels aerobically biodegrade, the n-alkanes are the first major group of compounds to be removed from the fuel. The branched alkanes or isoprenoids are more recalcitrant. In an unweathered JetA, the chromatographic peaks representing the n-alkanes in the range between octane and tridecane will be much taller than the peaks representing the isoprenoids, as is illustrated below in the combined gasoline/diesel/wax standard in Figure 1.



Figure 1



As the fuel biodegrades, the abundance gradually shifts in favor of the branched alkanes. In a more highly biodegraded fuel, the n-alkanes will have completely disappeared. Based on the predominance of isoprenoids in the chromatogram for the LNAPL from Well ASE-107A (Attachment A) it is apparent that it has undergone substantial biodegradation. Normal alkanes comprise about 25% of a fresh JetA<sup>1</sup>. The n-alkane content, or 25% of the total JetA content, has been lost from this sample due to aerobic biodegradation. The JP-4 does not appear to be biodegraded. These two fuels were separate releases at different times.

<sup>&</sup>lt;sup>1</sup>Sullivan, Patrick J., Agardy, Franklin J., Traub, Richard K., Practical Environmental Forensics: Process and Case Histories, Chapter 7, John Wiley & Sons, 2001.



Fuel percentages in the LNAPL sample from ASE-107A were calculated as follows:

 Areas from the three RT ranges were used to calculate the percentages of JetA and JP-4

Table 1 Calculations for ASE-107A LNAPL

Range	Area	Fuel Type
1	194040	JP-4
2	2908628	½ JP-4 and ½ JetA
3	4528828	JetA

 The JP-4 content estimated by the original method was then doubled to account for the 50:50 gasoline:kerosene composition, and the same amount was subtracted from the JetA content.

$$JP-4 = 20\% + 20\% = 40\%$$
  
 $JetA = 80\% - 20\% = 60\%$ 

A special condition exists in the ASE-107A LNAPL that had not previously observed in the LNAPL samples from the site. The JetA fuel in ASE-107A has been aerobically biodegraded. The



n-alkanes, which comprise about 25% of JetA when it is fresh, have been lost. In order to bring the estimated mixture percentages back to "fresh" unweathered fuels, 25% of the 60% JetA, which is 15%, is added back to the JetA value, giving 75% JetA and 40% JP-4. These results, 75% and 40%, add up to a total of 115%. The ratio of 75/115 is 65% JetA, leaving 40/115, or 35% for the JP-4 content, as reported in Table 2.

The error term for these calculations is approximately  $\pm 10\%$  and the numbers in Tables 2 and 3 should be considered estimates.

Table 2 Composition of Free Product Sampled 11/02/06

Well Sample	% <b>JP</b> -4	% Jet A
ASE-107A	35	65

Chromatograms from the previously collected LNAPL samples from the site were reviewed and it was observed that the sample from ASE-55A collected on 5/6/04 also exhibited substantial biodegradation of the JetA fraction. Fuel percetnages for this well sample were recalculated following the procedure shown above to compensate for the loss of the alkanes. The original and revised results are listed in Table 3.

Table 3
Composition of Free Product Well ASE-55A

Well Sample	% JP-4	% Jet A
ASE-55A (calculated 5/04)	30	70
ASE-55A (calculated 12/06)	25	75

Phil Burke February 13, 2007 Page 6\_\_\_\_\_



Based on the degree of biodegradation observed in the chromatograms from these two samples, ASE-55A and ASE-107A, compared with the chromatograms for the other LNAPL samples collected at the site, Wells ASE-55A and ASE-107A appear to have been located at the edges of the plume at the times they were collected, where biodegradation is reported to occur<sup>2</sup>.

Chromatograms of free product samples ASE-107-6D1 and ASE-55A-4B2, commercial vendor fuel standards for JP-4 and JetA, Wells ASE-111B (100% JP-4) and ASE-51A (100% JetA) are included in Attachment A.

The LNAPL sample from ASE-107A was also analyzed for volatile organic compounds in order to identify any chlorinated organics that might be present in the product. LNAPL samples require extensive dilution in order to be analyzed by EPA GC/MS volatile organics methodology. In this case, the sample was diluted 500 times and analyzed according to EPA Method 8260B. Ethylbenzene (270,000 ppb or 270 ppm) and total xylenes (44,000 ppb or 44 ppm, an estimated concentration) were detected. The concentration of xylenes is estimated because it fell below the lower end of the calibration range. No chlorinated compounds were detected in this diluted analysis.

In order to obtain lower detection limits, a second aliquot of the sample was shaken with an equal portion of laboratory water. The water was then analyzed by method 8260B. No chlorinated compounds were detected.

MTBE was detected at an estimated concentration of 5 ppb in the water fraction. MTBE partitions easily into the water (partition coefficient is approximately 10 which means that for every 10 ppb of MTBE in the fuel 1 ppb would be found in the water fraction). From this we can estimate the concentration of MTBE in the fuel to be about 50 ppb. Benzene was detected at a concentration of 15 ppb, toluene at 5 ppb, ethylbenzene at 69 ppb, and total xylenes at 24 ppb. Partition coefficients for these compounds in jet fuel are 300 for benzene, 200 for toluene, 3,000 for ethylbenzene, and 3,000 for total xylenes. Estimates of the respective concentrations in the LNAPL were calculated from the water fraction results, using the partition coefficients of 300, 200, 3,000, and 3,000, respectively. The estimated results are benzene and toluene at 4,000 ppb each, ethylbenzene at 200,000 ppb and total xylenes at 70,000 ppb. The partition results for benzene, toluene, and ethylbenzene match the non-detects from the straight LNAPL analysis (< 10,000 ppb

<sup>&</sup>lt;sup>2</sup>Johnson, Paul, Lundegrad, Paul, Liu, Zhuang, "Source Zone Natural Attenuation at Petroleum Hydrocarbon Spill Sites-I and -II," Ground Water Monitoring and Remediation, V26, N4, Fall 20006, pp 82-106.

Phil Burke February 13, 2007 Page 7



benzene and toluene, < 270,000 ppb ethylbenzene). The result for total xylenes is slightly higher than the result from the straight run (44,000 ppb).

The ratio of ethylbenzene to total xylenes can be used to determine whether or not a LNAPL has been anaerobically biodegraded. A ratio greater than 0.25 indicates that anaerobic biodegradation has taken place; a ratio of less than 0.25 indicates that the LNAPL has not undergone anaerobic biodegradation. The ethylbenzene to total xylenes ratio in the partition analysis for the Well ASE-107A LNAPL sample is 2.9, indicating that the aromatic components of the jet fuel, toluene and xylenes, have undergone substantial anaerobic biodegradation<sup>3</sup>.

Should you have any questions or comments, please feel free to call Jim Smith (610-383-7233) or me (302-992-9737) at your convenience.

Best regards,

Denise A. Shepperd

**Quality Assessment Manager** 

DAS/hrs Enclosures

cc:

Jim Smith, Trillium, Inc. Bob Frank, CH2M Hill

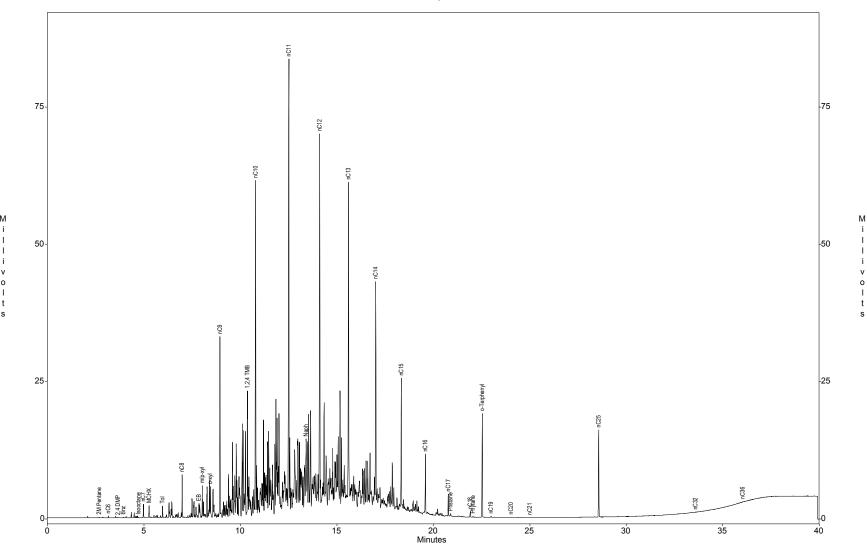
<sup>&</sup>lt;sup>3</sup>Smith, James S., DeWitt, Grant, Released Hydrocarbons - Aerobically or Anaerobically Biodegraded, National Ground Water Association, Ground Water and Environmental Law Conference, July 6-7, 2006.



# Attachment A Chromatograms

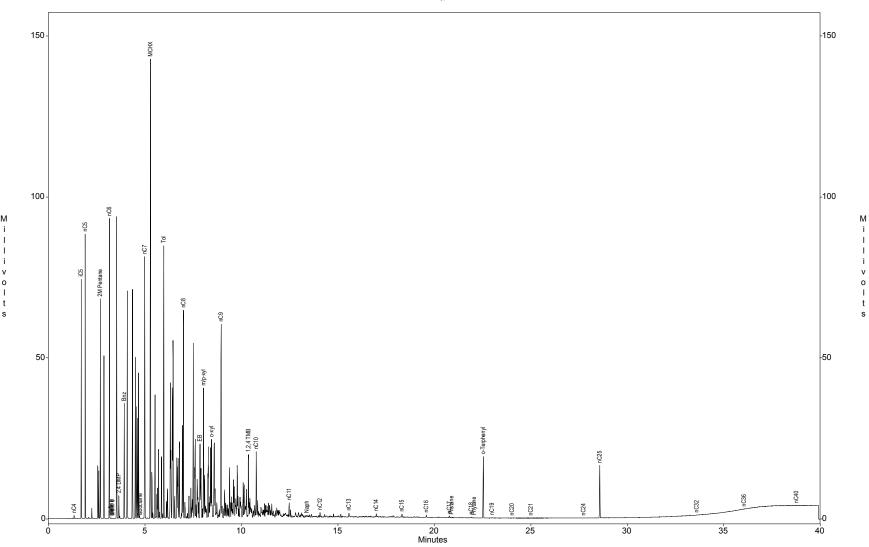
Allied Signal
Sample ID : Jet Fuel A
^^quired : May 03, 1999 16:25:06

c:\ezchrom\chrom\99053\jet-a -- Channel A



Allied Signal Sample ID : JP-4 Military Fuel : May 03, 1999 17:15:45 Acquired

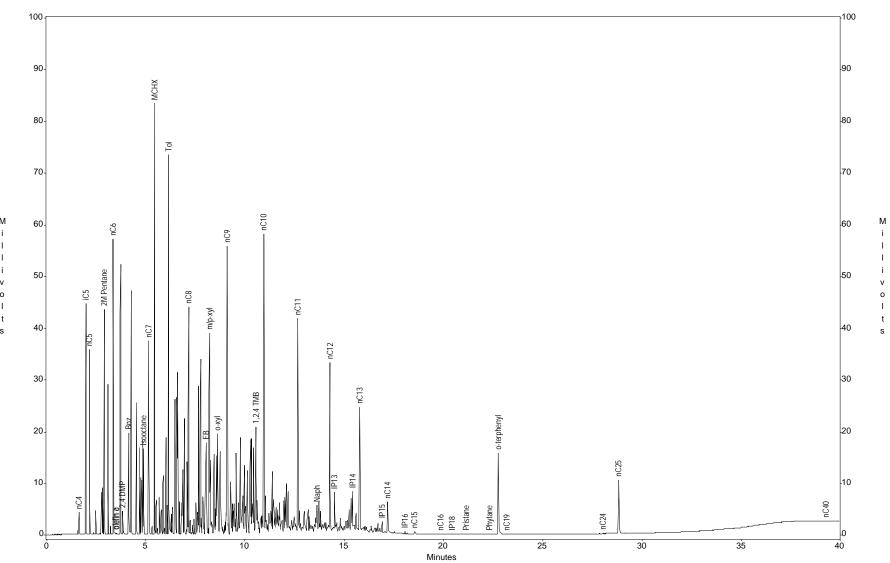
c:\ezchrom\chrom\99053\jp-4 -- Channel A



Honeywell Project

Sample ID : ASE-111B-5C2 Acquired : Jul 08, 2005 13:34:46

### c:\ezchrom\chrom\05092\111b-5c2 -- Channel A

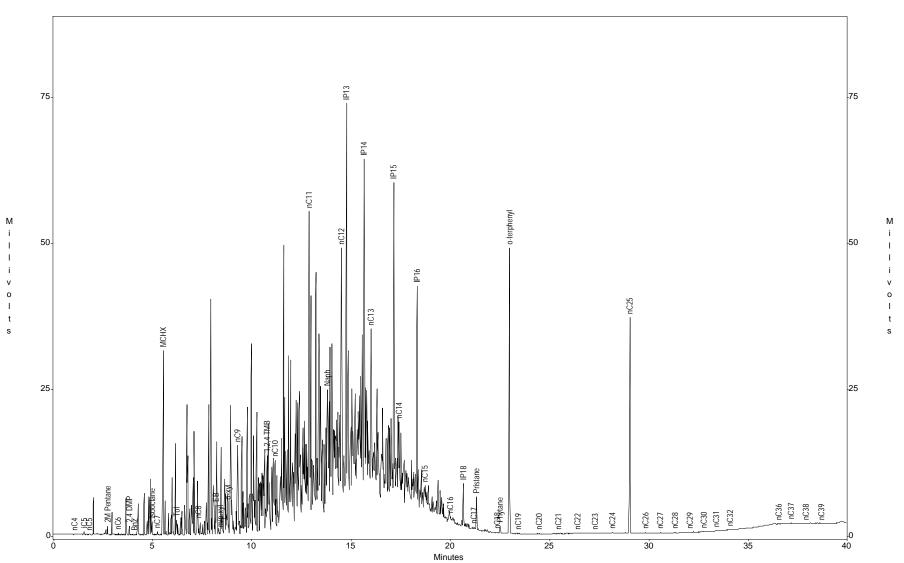


## Torkelson Geochemistry, Inc.

Honeywell Project Sample ID : AS : ASE-107A-6D1

. Acquired : Nov 03, 2006 16:12:25

c:\ezchrom\chrom\06158\107a6d1.3 -- Channel A

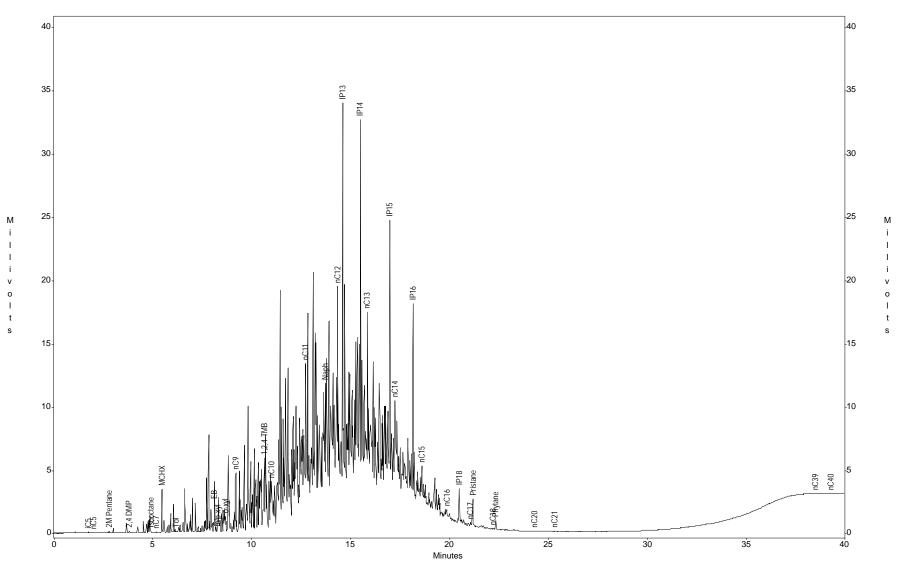


Honeywell Project

Sample ID : ASE-55A-4B2

Acquired : May 12, 2004 12:48:08

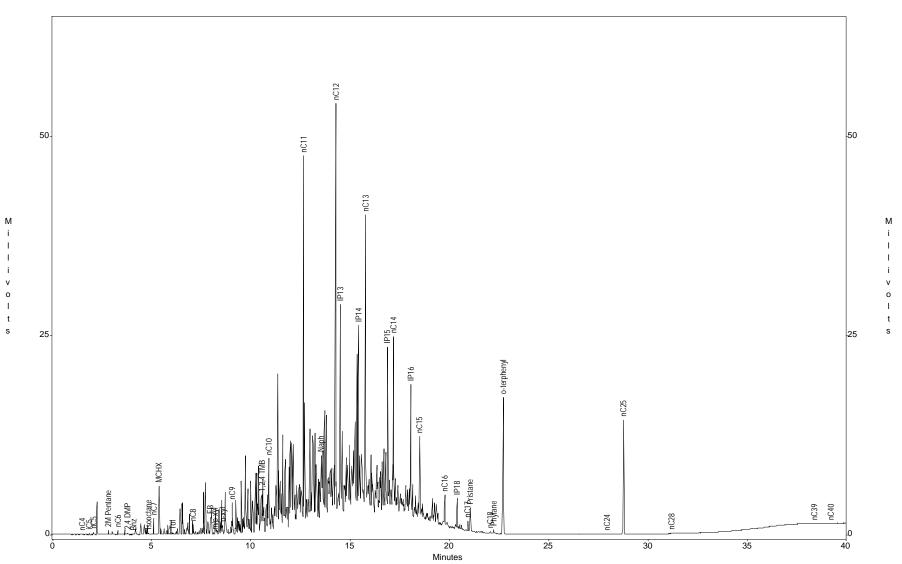
#### c:\ezchrom\chrom\04123\ase-55a -- Channel A



Honeywell Project Sample ID : AS : ASE-51A

Acquired : Jan 10, 2002 10:39:55

#### c:\ezchrom\chrom\02009\ase-51a -- Channel A





11/21/2006

Trillium, Inc. 2014 Carol Drive Wilmington, DE 19808 **STL Edison** 777 New Durham Road Edison, NJ 08817

Tel 732 549 3900 Fax 732 549 3679 www.stl-inc.com

Attention: Ms. Dee Shepperd

Laboratory Results Job No. Z294 - Sky Harbor

Dear Ms. Shepperd:

Enclosed are the results you requested for the following sample(s) received at our laboratory on November 3, 2006.

<u>Lab No.</u> <u>Client ID</u> <u>Analysis Required</u>

783079 ASE-107A-6D1 TCL VOA

If you have any questions please contact your Project Manager, Rui Macieira, at (732) 549-3900.

Very Truly Yours,

Michael Urban

Laboratory Manager

Michael S. Ubas



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Results Summary and Chromatograms	. 16
Results Summary and Chromatograms	. 16 . 23
Results Summary and Chromatograms	. 16 . 23 . 32
Results Summary and Chromatograms	. 16 . 23 . 32 . 41

## **Analytical Results Summary**

Client ID: ASE-107A-6D1 Lab Sample No: 783079

Site: Sky Harbor Lab Job No: Z294

Date Sampled: 11/02/06 Matrix: ORGANIC
Date Received: 11/03/06 Level: HIGH

Date Analyzed: 11/14/06 Sample Weight: 0.5 g
GC Column: Rtx-VMS Methanol Ext. Volume: 10.0 ml
Instrument ID: VOAMS8.i Ext. Dilution Factor: 500.0

Lab File ID: j70253.d % Moisture: 0

#### VOLATILE ORGANICS - GC/MS METHOD 8260B

	Analytical Results Units: ug/kg	Quantitation Limit
<u>Parameter</u>	onico. ug/ng	<u>Units: ug/kg</u>
Chloromethane	ND	50000
Bromomethane	ND	50000
Vinyl Chloride	ND	50000
Chloroethane	ND	50000
Methylene Chloride	ND	30000
Acetone	ND	50000
Carbon Disulfide	ND	50000
Trichlorofluoromethane	ND	50000
1,1-Dichloroethene	ND	20000
1,1-Dichloroethane	ND	50000
trans-1,2-Dichloroethene	ND	50000
cis-1,2-Dichloroethene	ND	50000
Chloroform	ND	50000
1,2-Dichloroethane	ND	20000
2-Butanone	ND	50000
1,1,1-Trichloroethane	ND	50000
Carbon Tetrachloride	ND	20000
Bromodichloromethane	ND	10000
1,2-Dichloropropane	ND	10000
cis-1,3-Dichloropropene	ND	50000
Trichloroethene	ND	10000
Dibromochloromethane	ND	50000
1,1,2-Trichloroethane	ND	30000
Benzene	ND	10000
trans-1,3-Dichloropropene	ND	50000
Bromoform	ND	40000
4-Methyl-2-Pentanone	ND	50000
2-Hexanone	ND	50000
Tetrachloroethene	ND	10000
1,1,2,2-Tetrachloroethane	ND	10000
Toluene	ND	50000
Chlorobenzene	ND	50000
Ethylbenzene	270000	40000
Styrene	ND	50000

Lab Sample No: 783079 Lab Job No: Z294 Client ID: ASE-107A-6D1

Site: Sky Harbor

Matrix: ORGANIC Date Sampled: 11/02/06 Date Received: 11/03/06 Level: HIGH

Sample Weight: 0.5 g Date Analyzed: 11/14/06 Methanol Ext. Volume: 10.0 ml GC Column: Rtx-VMS Instrument ID: VOAMS8.i Ext. Dilution Factor: 500.0

Lab File ID: j70253.d % Moisture: 0

### VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

<u>Parameter</u>	Analytical Results Units: ug/kg	Quantitation Limit <u>Units: uq/kg</u>
Xylene (Total)	44000 J	50000
Freon TF	ND	50000
Dichlorodifluoromethane	ND	50000

## **General Information**

Chain of Custody

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reservatives: 0 = None; {1 = HCL}; {2 = HNO3}; {3 = H2SO4}; {4 = NaOH}; {5 = Zn. Acetate}; {6}	(03]; [3 = H2SO4]; [4 =	. NaOH]; (5 = Z	. Acetatel; (	= MeOH]; [7	7 = NaHSO4]; 8 = Other (specify);	]; 8 = Or	her (spe	ify):						_				

**Laboratory Chronicles** 

## INTERNAL CUSTODY RECORD AND LABORATORY CHRONICLE STL Edison

# 777 New Durham Road, Edison, New Jersey 08817

Job No:	<u>Z294</u>	Site:	Sky Harbor	
Client:	Trillium, Inc.			
	VOAMS			

## ORGANIC - 8260B

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
783079	11/2/2006	11/3/2006			11/14/2006	Martinez, Eddie	1084

Methodology Review

#### Analytical Methodology Summary

#### Volatile Organics:

Unless otherwise specified, water samples are analyzed for volatile organics by purge and trap GC/MS as specified in EPA Method 624. Drinking water samples are analyzed by EPA Method 524.2 Rev 4.1. Solid samples are analyzed for volatile organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8260B.

#### Acid and Base/Neutral Extractable Organics:

Unless otherwise specified, water samples are analyzed for acid and/or base/neutral extractable organics by GC/MS in accordance with EPA Method 625. Solids are analyzed for acid and/or base/neutral extractable organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8270C.

#### GC/MS Nontarget Compound Analysis:

Analysis for nontarget compounds is conducted, upon request, in conjunction with GC/MS analyses by EPA Methods 624, 625, 8260B and 8270C. Nontarget compound analysis is conducted using a forward library search of the EPA/NIH/NBS mass spectral library of compounds at the greatest apparent concentration (10% or greater of the nearest internal standard) in each organic fraction (15 for volatile, 15 for base/neutrals and 10 for acid extractables).

#### Organochlorine Pesticides and PCBs:

Unless otherwise specified, water samples are analyzed for organochlorine pesticides and PCBs by dual column gas chromatography with electron capture detectors as specified in EPA Method 608. Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8081A for organochlorine pesticides and Method 8082 for PCBs.

#### Total Petroleum Hydrocarbons:

Water samples are analyzed for petroleum hydrocarbons by I.R. using EPA Method 418.1. Solid samples are prepared for analysis by soxhlet extraction consistent with the March 1990 N.J. DEP "Remedial Investigation Guide" Appendix A, page 52, and analyzed by U.S. EPA Method 418.1

#### Metals Analysis:

Metals analyses are performed by any of four techniques specified by a Method Code provided on each data report page, as follows:

- P Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP)
- A Flame Atomic Absorption
- F Furnace Atomic Absorption
- CV Manual Cold Vapor (Mercury)

Water samples are digested and analyzed using EPA methods provided in "Methods for Chemical Analysis of Water and Wastewater" (EPA 600/4-79-020). Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition); samples are digested according to Method 3050B "Acid Digestion of Soil, Sediments and Sludges."

Specific method references for ICP analyses are water Method - 200.7/SW846 6010B and for solid matrix - 6010B. Mercury analyses are conducted by the manual cold vapor technique specified by water Method 245.1/7470A and solid Method 7471A. Other specific Atomic Absorption method references are as follows:

Element	Water Test Method <u>Furnace</u>	Solid Test Method Furnace
Antimony	200.9	7041
Arsenic	200.9	7060A
Cadmium	200.9	7131A
Lead	200.9	7421
Selenium	200.9	7740
Thallium	200.9	7841

#### Cyanide:

Water samples are analyzed for cyanide using EPA Method 335.3. Cyanide is determined in solid samples as specified in the EPA Contract Laboratory Program IFB dated July 1988, revised February 1989.

#### Phenols:

Water samples are analyzed for total phenols using EPA Method 420.2. Total phenols are determined in water and solid samples by preparing the sample as outlined in the EPA Contract Laboratory Program IFB for cyanide, followed by a phenols determination using EPA Method 420.1.

#### Hexavalent Chromium:

Water samples are analyzed using EPA Method 7196A, EPA Method 7199 or (upon request) USGS -1230-35. Soil samples are subjected to alkaline digestion via EPA Method 3060A prior to analysis by EPA Method 7196A or EPA Method 7199.

#### Cleanup of Semivolatile Extracts:

Upon request Method 3611B Alumina Column Cleanup and/or Method 3650B Acid-Base Partition Cleanup are performed to improve detection limits by the removal of saturated hydrocarbon interferences.

#### Hazardous Waste Characteristics:

Samples for hazardous waste characteristics are analyzed as specified in the U.S. EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition). Specific method references are as follows:

Ignitability - Method 1020A

Corrosivity - Water pH Method 9040B Soil pH Method 9045C

Reactivity - Chapter 7, Section 7.3.3 and 7.3.4 respectively for hydrogen cyanide and hydrogen sulfide release

Toxicity - TCLP Method 1311

#### Miscellaneous Parameters:

Additional analyses performed on both aqueous and solid samples are in accordance with methods published in the following references:

- Test Methods for Evaluating Solid Wastes, SW-846 3rd Edition, November 1986.
- Standard Methods for the Examination of Water and Wastewater, 18th Edition.
- Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, 1979.

Data Reporting Qualifiers

#### DATA REPORTING QUALIFIERS

- ND The compound was not detected at the indicated concentration.
  - J Mass spectral data indicates the presence of a compound that meets the identification criteria. The result is less than the specified detection limit but greater than zero. The concentration given is an approximate value.
  - B The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.
  - P For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
  - \* For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

Non-Conformance Summary



## **Nonconformance Summary**

STL Edison Job Number: <u>Z294</u>

Client: <u>Trillium, Inc.</u>

**Date:** <u>11/20/2006</u>

## **Sample Receipt:**

Cooler temperature at receipt was outside the acceptable range of 0-6 deg C. Actual sample temperature was 26 deg C.

## **Volatile Organic Analysis (GC/MS):**

QA batch 1084: MS/MSD % recovery of 1,2-Dichloropropane is outside of Q.C. limits due to matrix interference (Blank Spike recovery is within QC limits). Ethylbenzene and Isopropylbenzene sample amounts too high for spike level.

I certify that the test results contained in this data package meet all requirements of NELAC both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Michael J.Urban Laboratory Manager

Michael S. Ubas

## **GC/MS Forms and Data (Volatiles)**

Results Summary and Chromatograms

Lab Sample No: 783079 Client ID: ASE-107A-6D1

Lab Job No: Z294 Site: Sky Harbor

Date Sampled: 11/02/06 Matrix: ORGANIC Level: HIGH

Date Received: 11/03/06 Date Analyzed: 11/14/06

Sample Weight: 0.5 g Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 500.0 GC Column: Rtx-VMS Instrument ID: VOAMS8.i

Lab File ID: j70253.d % Moisture: 0

### VOLATILE ORGANICS - GC/MS METHOD 8260B

	Analytical Results	Quantitation
	Units: ug/kg	Limit
<u>Parameter</u>		<u> Units: ug/kg</u>
		50000
Chloromethane	ND	50000
Bromomethane	ND 	50000
Vinyl Chloride	ND	50000
Chloroethane	ND	50000
Methylene Chloride	ND	30000
Acetone	ND	50000
Carbon Disulfide	ND	50000
Trichlorofluoromethane	ND	50000
1,1-Dichloroethene	ND	20000
1,1-Dichloroethane	ND	50000
trans-1,2-Dichloroethene	ND	50000
cis-1,2-Dichloroethene	ND	50000
Chloroform	ND	50000
1,2-Dichloroethane	ND	20000
2-Butanone	ND	50000
1,1,1-Trichloroethane	ND	50000
Carbon Tetrachloride	ND	20000
Bromodichloromethane	ND	10000
1,2-Dichloropropane	ND	10000
cis-1,3-Dichloropropene	ND	50000
Trichloroethene	ND	10000
Dibromochloromethane	ND	50000
1,1,2-Trichloroethane	ND	30000
Benzene	ND	10000
trans-1,3-Dichloropropene	ND	50000
Bromoform	ND	40000
4-Methyl-2-Pentanone	ND	50000
2-Hexanone	ND	50000
Tetrachloroethene	ND	10000
1,1,2,2-Tetrachloroethane	ND	10000
Toluene	ND	50000
Chlorobenzene	ND	50000
Ethylbenzene	270000	40000
Styrene	ND	50000

Client ID: ASE-107A-6D1 Lab Sample No: 783079

Site: Sky Harbor Lab Job No: Z294

Date Sampled: 11/02/06 Matrix: ORGANIC Date Received: 11/03/06 Level: HIGH

Date Analyzed: 11/14/06 Sample Weight: 0.5 g GC Column: Rtx-VMS Methanol Ext. Volume: 10.0 ml

Instrument ID: VOAMS8.i Ext. Dilution Factor: 500.0 Lab File ID: j70253.d

% Moisture: 0

### VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

<u>Parameter</u>	Analytical Results Units: ug/kg	Quantitation Limit <u>Units: ug/kg</u>
Xylene (Total)	44000 J	50000
Freon TF	ND	50000
Dichlorodifluoromethane	ND	50000

Data File: /chem/VOAMS8.i/8260HIGH SP/10-24-06/14nov06.b/j70253.d

Report Date: 17-Nov-2006 23:09

#### STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file: /chem/VOAMS8.i/8260HIGH SP/10-24-06/14nov06.b/j70253.d Lab Smp Id: 783079 Client Smp ID: ASE-107A-6D1

Inj Date : 14-NOV-2006 19:10

Inst ID: VOAMS8.i Operator : VOAMS 3

Smp Info : 783079;500;;0.5;10 Misc Info : Z294;1084;;EM

Comment

: /chem/VOAMS8.i/8260HIGH\_SP/10-24-06/14nov06.b/8260H 06.m Method

Meth Date : 14-Nov-2006 16:24 eddie Quant Type: ISTD Cal Date : 24-OCT-2006 21:17 Cal File: j69791.d

Als bottle: 6

Dil Factor: 500.00000

Integrator: HP RTE Compound Sublist: HSL freons.sub

Target Version: 3.50

Concentration Formula: Amt \* DF \* (Vt/Ws)/((100-M)/100) \* CpndVariable

Name	Value	Description
DF	500.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	0.50000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

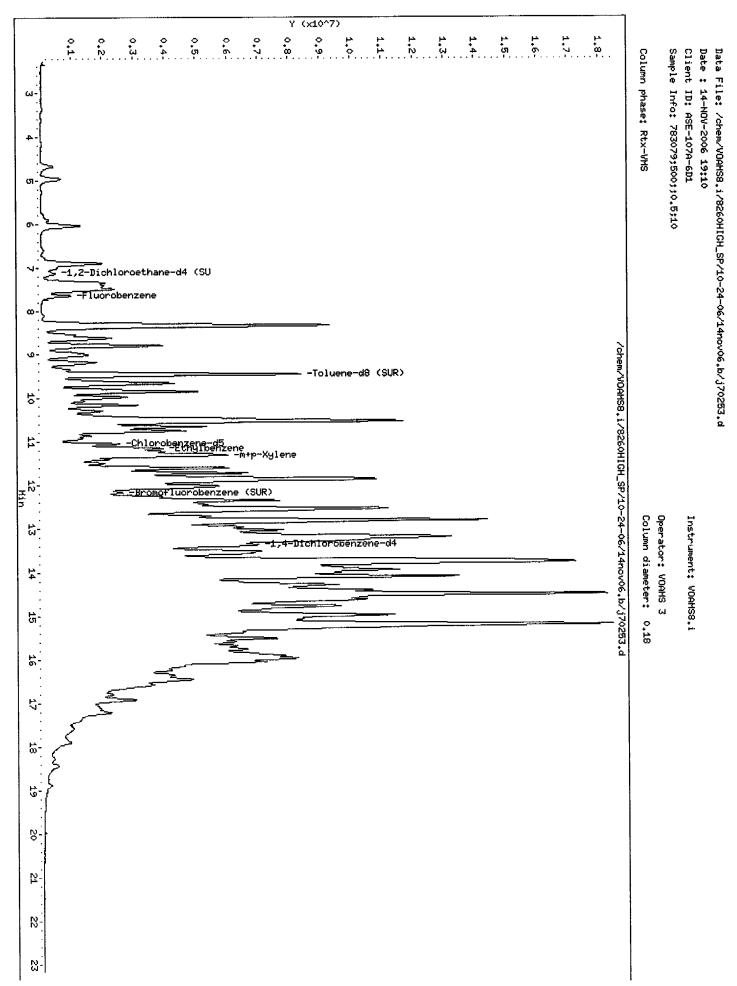
Cpnd Variable Local Compound Variable

						CONCENTRA	ATIONS
		QUANT SIG				ON-COLUMN	FINAL
Co	ompounds	MASS	RT	EXP RT REL RT	RESPONSE	(ug/L)	(ug/Kg)
==		====	==	=======================================	*****		======
\$	16 1,2-Dichloroethane-d4 (SUR)	65	7.203	7.226 (0.942)	36928	3.55226	36000
*	19 Fluorobenzene	96	7.649	7.660 (1.000)	1969640	50.0000	
\$	37 Toluene-d8 (SUR)	98	9.472	9.511 (0.858)	823283	34.5006	340000(R)
*	32 Chlorobenzene-d5	117	11.039	11.040 (1.000)	1333304	50.0000	
	40 Ethylbenzene	106	11.157	11.163 (1.011)	261334	26.6462	270000
	43 m+p-Xylene	106	11.276	11.271 (1.021)	57781	4.40031	44000(a)
\$	41 Bromofluorobenzene (SUR)	174	12.189	12.183 (0.914)	57636	5.97284	60000
*	91 1,4 Dichlorobenzene-d4	152	13.340	13.357 (1.000)	612048	50.0000	
М	45 Xylene (Total)	100			57781	4.45852	44000(a)

#### QC Flag Legend

- a Target compound detected but, quantitated amount
- Below Limit Of Quantitation (BLOQ). R - Spike/Surrogate failed recovery limits.

Sure confirmed by ms/msD



Data File: /chem/VOAMS8.i/8260HIGH\_SP/10-24-06/14nov06.b/j70253.d

Date : 14-NOV-2006 19:10 Client ID: ASE-107A-6D1

Instrument: VOAMS8.i

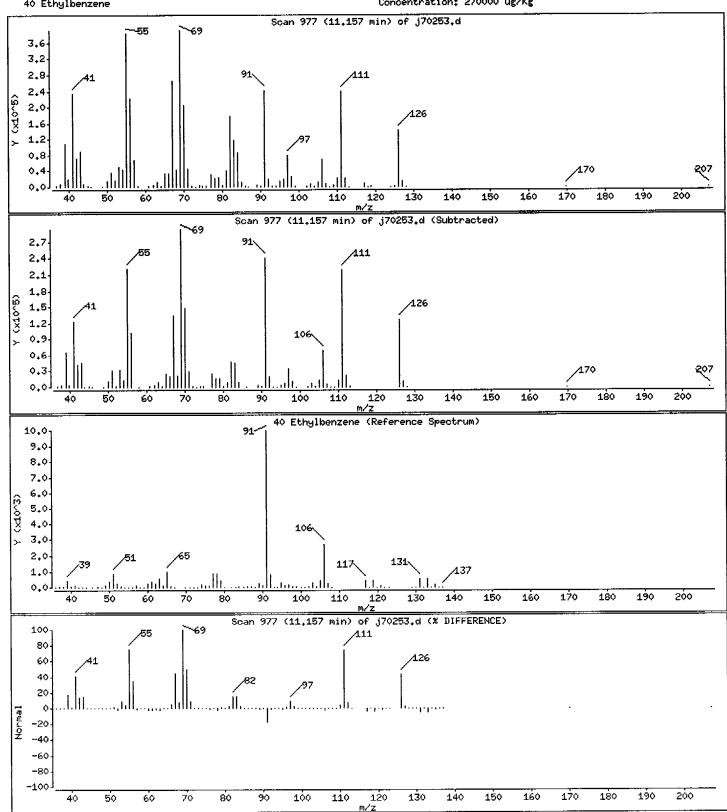
Sample Info: 783079;500;;0.5;10

Operator: VOAMS 3

Column diameter: 0.18 Column phase: Rtx-VMS



Concentration: 270000 ug/Kg



Data File: /chem/VOAMS8.i/8260HIGH\_SP/10-24-06/14nov06.b/j70253.d

Date: 14-NOV-2006 19:10 Client ID: ASE-107A-6D1

Instrument: VOAMS8.i

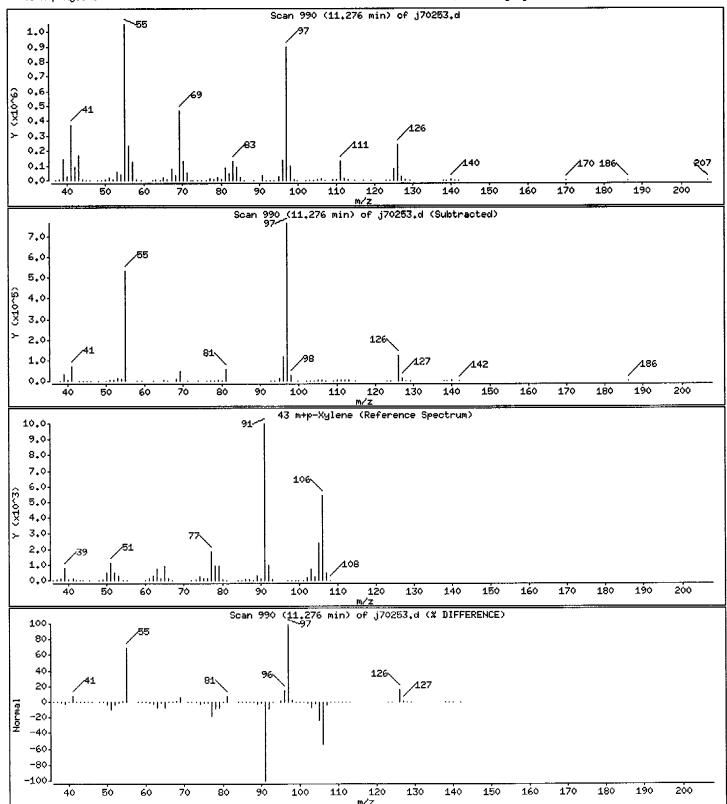
Sample Info: 783079;500;;0.5;10

Operator: VOAMS 3

Column phase: Rtx-VMS Column diameter: 0.18

43 m+p-Xylene

Concentration: 44000 ug/Kg



Tuning Results Summary

# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK BROMOFLUOROBENZENE (BFB)

Lab File ID: J69782

BFB Injection Date: 10/24/06

Instrument ID: VOAMS8

BFB Injection Time: 1337

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
===== 50 75 95 96 173 174 175 176	15.0 - 40.0% of mass 95 30.0 - 60.0% of mass 95 Base Peak, 100% relative abundance 5.0 - 9.0% of mass 95 Less than 2.0% of mass 174 50.0 - 100.0% of mass 95 5.0 - 9.0% of mass 174 95.0 - 101.0% of mass 174 5.0 - 9.0% of mass 176	18.2 40.9 100.0 6.4 0.3 ( 0.4)1 63.3 4.8 ( 7.6)1 62.8 ( 99.3)1 4.2 ( 6.7)2
l	1-Value is % mass 174 2-Value is % mass	176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

					<del></del>
		LAB	LAB	DATE	TIME
	CLIENT ID	SAMPLE No.	FILE ID	ANALYZED	ANALYZED
	CDIENT ID	DAME DE NO.	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
	_=========	==========	=======	10/04/06	1456
01	JSTD010	JSTD010	J69785	10/24/06	1456
02	JSTD020	JSTD020	J69786	10/24/06	1521
03	JSTD050	JSTD050	J69787	10/24/06	1547
		JSTD100	J69788	10/24/06	1612
04	JSTD100			10/24/06	1638
05	JSTD200	JSTD200	J69789		
06	JSTD005	JSTD005	J69791	10/24/06	2117
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page 1 of 1

Data File: /chem/VOAMS8.i/8260H1GH\_SP/10-24-06/24oct06.b/j69782.d

Date : 24-00T-2006 13:37

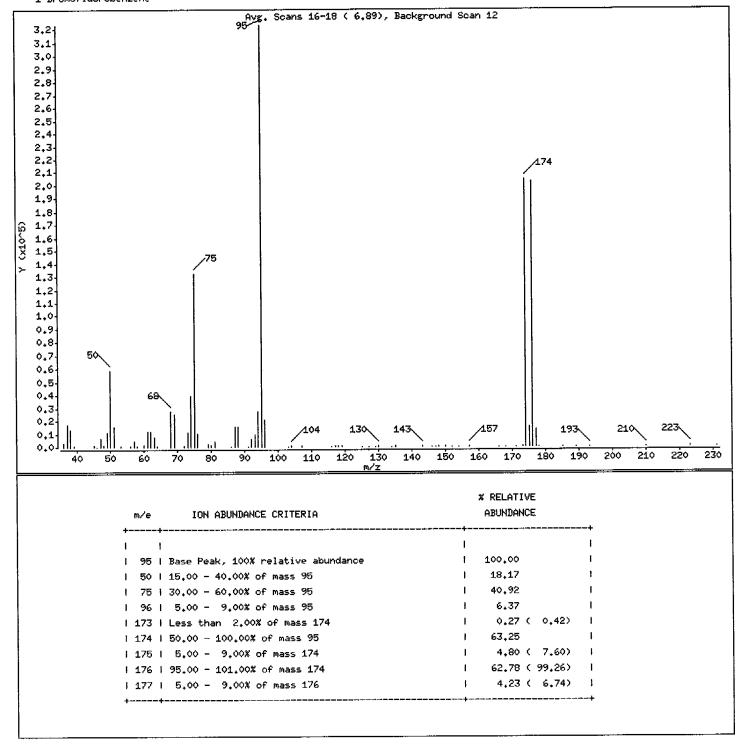
Client ID:

Instrument: VOAMS8.i

Sample Info: JBFB297

Operator: VOAMS 1
Column diameter: 0.53

Column phase: DB-624
1 Bromofluorobenzene



Data File: /chem/VOAMS8.i/8260HIGH\_SP/10-24-06/24oct06.b/j69782.d

Date : 24-00T-2006 13:37

Client ID:

Instrument: VOAMS8.i

Sample Info: JBFB297

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53

Data File: j69782.d

Spectrum: Avg. Scans 16-18 ( 6.89), Background Scan 12

Location of Maximum: 95.00 Number of points: 75

Υ	m/z	Υ.	m/z		Y	m/z		Y	m/z	
38	152.00	20608	96.00	1	 567	64,00	+ I	2808	36.00	
112	154.00	304 I	103.00	ı	27160	68,00	1	17104	37.00	
822	157.00	1033 I	104,00	ł	25608	69,00	ı	13416	38.00	
206	166,00	610 I	107.00	ı	768	72.00	1	783	39,00	
321	168,00	290 I	116.00	1	10927	73.00	I	1454	45,00	
229	171,00	791, I	117.00	1	39496	74.00	+	 181	46,00	_
857	173,00	915 I	118,00	ı	132288	75.00	ı	6356	47.00	
204544	174.00	797 I	119,00	1	10352	76.00	ı	1808	48,00	
15538	175,00	106 I	125,00	1	2369	79.00	ı	11080	49,00	
203008	176.00	127 I	127,00		1195	80,00	1	58760	50.00	
13676	177.00	•	129.00	•	4107	81,00	+- 	15510	51.00	_
89	178,00	923 1	130.00	ı	263	86.00	ı	415	53,00	
62	185.00	203 I	134,00	ı	15263	87,00	ı	619	56.00	
184	189.00	608 I	135,00	ł	15370	88,00	ı	4170	57.00	
203	193,00	894 l	143.00	1	273	91.00	l	583	58,00	
198	210.00	•	146,00	1	5831	92.00	- <b>+</b> -	1651	60,00	
58	223,00	18 I	147,00	ı	9295	93.00	ı	11731	61.00	
217	231.00	670 I	148.00	ţ	27304	94,00	t	11938	62.00	
		452 I	150,00	ı	323328	95,00	1	7588	63.00	ı

Data File: /chem/VOAMS8.i/8260HIGH\_SP/10-24-06/24oct06.b/j69782.d

Date : 24-0CT-2006 13:37

Client ID:

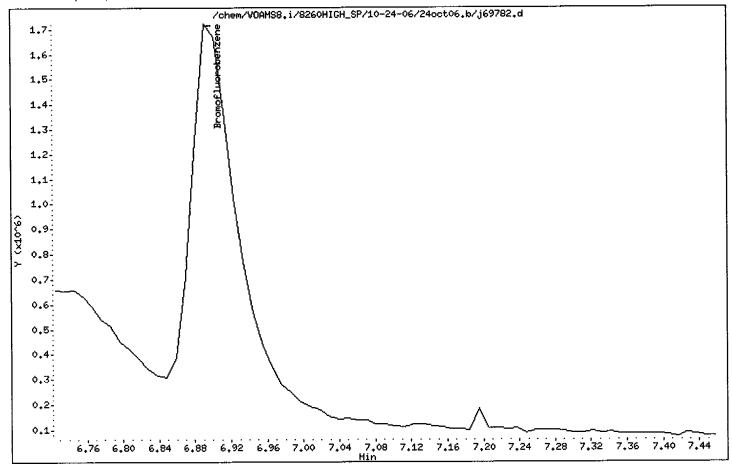
Instrument: VOAMS8.i

Sample Info: JBFB297

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53



# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK BROMOFLUOROBENZENE (BFB)

Lab File ID: J70246 BFB Injection Date: 11/14/06

Instrument ID: VOAMS8 BFB Injection Time: 1515

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
=====		===========
50	15.0 - 40.0% of mass 95	15.1
75	30.0 - 60.0% of mass 95	40.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.3 ( 0.4)1
174	50.0 - 100.0% of mass 95	70.2
175	5.0 - 9.0% of mass 174	4.4 ( 6.2)1
176	95.0 - 101.0% of mass 174	68.7 ( 97.9)1
177	5.0 - 9.0% of mass 176	5.2 ( 7.6)2
'——	1-Value is % mass 174 2-Value is % mass	176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

		LAB	LAB	DATE	TIME
	CLIENT ID	SAMPLE No.	FILE ID	ANALYZED	ANALYZED
	========	==========		=======	=======
01	JSTD318	JSTD318	J70248	11/14/06	1608
02	JV318	JV318	J70251	11/14/06	1743
03	ASE-107A-6D1	783079	J70253	11/14/06	1910
04	ASE-107A-6D1	783079MS	J70254	11/14/06	1939
05	ASE-107A-6D1	783079MSD	J70255	11/14/06	2009
06					
07					
80					
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page 1 of 1

Data File: /chem/VOAMS8.i/8260HIGH\_SP/10-24-06/14nov06.b/j70246.d

Date : 14-NOV-2006 15:15

Client ID:

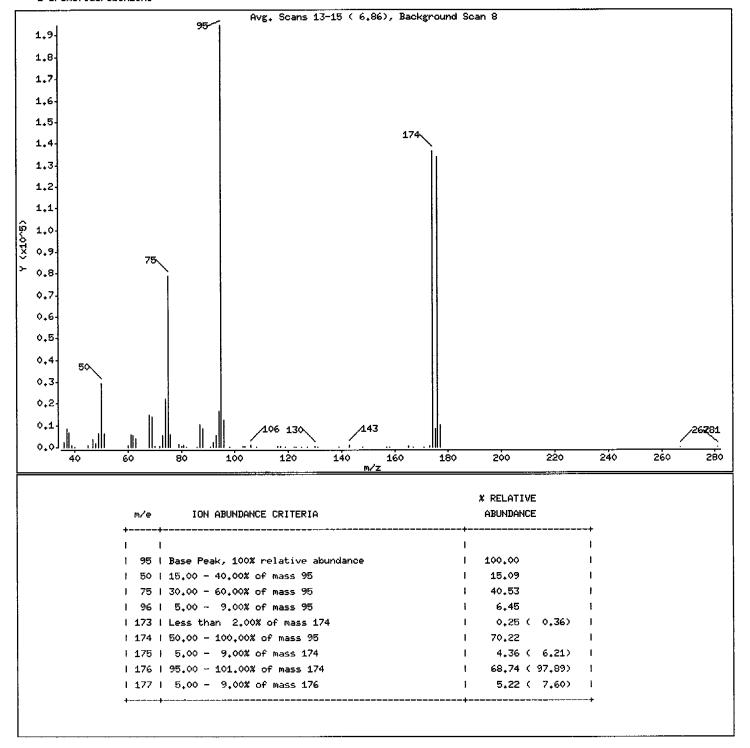
Instrument: VOAMS8.i

Sample Info: JBFB318

Operator: VOAMS 1

1 Bromofluorobenzene





Date : 14-NOV-2006 15:15

Client ID:

Instrument: VOAMS8.i

Sample Info: JBFB318

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53

Data File: j70246.d

Spectrum: Avg. Scans 13-15 ( 6.86), Background Scan 8

Location of Maximum: 95.00 Number of points: 65

Y			Y 	m/z		Y 	m/z		Υ	m/z	
703	143.00	•			•	391	70,00		2238	36.00	
193	148,00	1	12551	96,00	I	276	72.00	1	8301	37,00	
118	157.00	ı	181	98.00	ı	5256	73,00	ı	6546	38.00	
169	158.00	ı	435	103,00	i	22328	74.00	1	901	39,00	
252	165.00			104,00		78904	75.00		100	40,00	
194	167.00			106,00			76.00		1010	45,00	
207	171,00	I	189	108,00	1	1204	79.00	I	3583	47,00	
492	173,00	ł	579	116,00	ı	377	80.00	ı	1796	48,00	
136704	174,00	ı	234	117.00	ı	1007	81,00	1	6152	49,00	
8491				•		24			29384	50,00	
	176,00	•				 168			6488	51,00	
10171	177.00	١	180	123.00	ı	10310	87.00	1	1006	60.00	
197	267.00	I	194	125,00	Ī	8409	88.00	ı	5659	61,00	
207	281,00	ı	12	127,00	ı	146	91.00	ı	5176	62,00	
			525	130,00		2159	-		4128	63,00	
		•	22		-	5252				68.00	
		ı	67	139,00	ı	16672	94.00	1	13698	69.00	

Data File: /chem/VOAMS8.i/8260HIGH\_SP/10-24-06/14nov06.b/j70246.d

Date : 14-NOV-2006 15:15

Client ID:

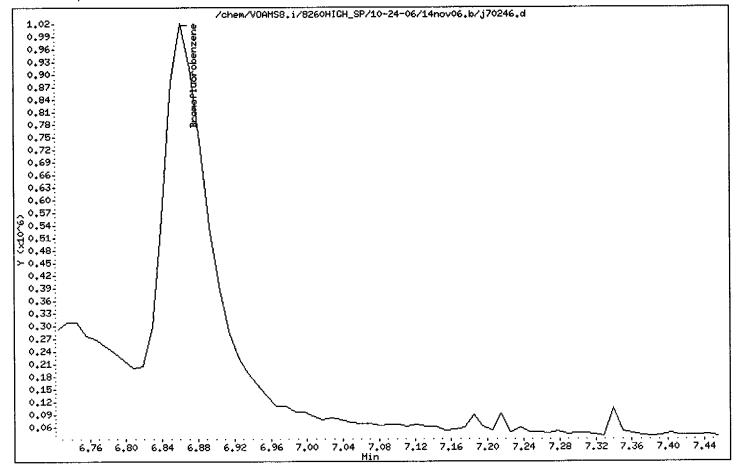
Instrument: VOAMS8.i

Sample Info: JBFB318

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53



Method Blank Results Summary

#### VOLATILE METHOD BLANK SUMMARY

JV318
-------

Matrix: ORGANIC Date Analyzed: 11/14/06

Level: HIGH Time Analyzed: 1743

Lab File ID: J70251 Heated Purge (Y/N) N

Instrument ID: VOAMS8

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

		LAB	LAB	TIME
	CLIENT ID.	SAMPLE NO	FILE ID	ANALYZED
0.7		=======================================	=====================================	1910
01 02	ASE-107A-6D1 ASE-107A-6D1MS	783079 783079MS	J70253 J70254	1939
02	ASE-107A-6D1MS ASE-107A-6D1MSD	783079MSD	J70254	2009
04	ASE-IO/A-ODIMSD	76307JMSD	670233	2005
05				
06				
07				
08				
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COMMENTS:		

page 1 of 1

Lab Sample No: JV318 Client ID: JV318

Lab Job No: Z294 Site:

Date Sampled: \_\_\_\_\_\_
Date Received: \_\_\_\_\_ Matrix: ORGANIC Level: HIGH

Sample Weight: 5.0 g

Date Analyzed: 11/14/06 GC Column: Rtx-VMS Instrument ID: VOAMS8.i Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 50.0

% Moisture: 0 Lab File ID: j70251.d

#### VOLATILE ORGANICS - GC/MS METHOD 8260B

<u>Parameter</u>	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit <u>Units: uq/kg</u>
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide Trichlorofluoromethane 1,1-Dichloroethene 1,1-Dichloroethene trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene 2-Chloroethyl Vinyl Ether Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Tetrachloroethane Tetrachloroethane	(Dry Weight)  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	Units: uq/kg  500 500 500 500 500 500 500 500 500 5
Toluene Chlorobenzene Ethylbenzene	ND ND ND	500 500 400

Client ID: JV318

Lab Sample No: JV318

Site:

Lab Job No: Z294

Matrix: ORGANIC

Date Sampled:
Date Received:
Date Analyzed: 11/14/06
GC Column: Rtx-VMS

Level: HIGH Sample Weight: 5.0 g

GC Column: Rtx-VMS
Instrument ID: VOAMS8.i

Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 50.0

Lab File ID: j70251.d % Moisture: 0

<u>Parameter</u>	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit <u>Units: ug/kg</u>
Sturono	ND	500
Styrene Xylene (Total)	ND	500
Ethyl Ether	ND	500
Acrolein	ND	10000
Freon TF	ND	500
Isopropanol	ND	50000
Acetonitrile	ND	10000
TBA	ND	10000
Acrylonitrile	ND	5000
MTBE	ND	500
Hexane	ND	500
DIPE	ND	500
Ethyl Acetate	ND	1000
Vinyl Acetate	ND	500
Tetrahydrofuran	ND	500
Cyclohexane	ND	500
Isobutanol	ND	50000
Isopropyl Acetate	ND	1000
n-Heptane	ND	500
n-Butanol	ND	50000
Propyl Acetate	ND	1000
Butyl Acetate	ND	1000
1,2-Dibromoethane	ND	500
1,3-Dichlorobenzene	ND	500
1,4-Dichlorobenzene	ND	500
1,2-Dichlorobenzene	ND	500
Naphthalene	ND	500
Methylnaphthalene (total)	ND	500
Dimethylnaphthalene (total)	ND	500
Dichlorodifluoromethane	ND	500
1,1-Dichloropropene	ND	500
1,2,4-Trichlorobenzene	ND	500
Hexachlorobutadiene	ND	500
1,4-Dioxane	ND	100000

Client ID: JV318

Site:

Lab Sample No: JV318

Methanol Ext. Volume: 10.0 ml

Lab Job No: Z294

Date Sampled: Matrix: ORGANIC
Date Received: Level: HIGH
Date Analyzed: 11/14/06 Sample Weight: 5.0 g

Date Analyzed: 11/14/06 GC Column: Rtx-VMS Instrument ID: VOAMS8.i

Instrument ID: VOAMS8.i Ext. Dilution Factor: 50.0 Lab File ID: j70251.d % Moisture: 0

	Analytical Results	Quantitation Limit
<u>Parameter</u>	Units: ug/kg (Dry Weight)	Units: ug/kg
Methyl Acrylate	ND	500
1,1,1,2-Tetrachloroethane	ND	500
1,2,3-Trichlorobenzene	ND	500
1,2,3-Trichloropropane	ND	500
1,2,4-Trimethylbenzene	ND	500
1,2-Dibromo-3-chloropropane	ND	500
1,3,5-Trimethylbenzene	ND	500
1,3-Dichloropropane	ND	500
2,2-Dichloropropane	ND	500
2-Chlorotoluene	ND	500
4-Chlorotoluene	ND	500
Bromobenzene	ND	500
Bromochloromethane	ND	500
Dibromomethane	ND	500
Isopropylbenzene	ND	500
n-Butylbenzene	ND	500
n-Propylbenzene	ND	500
p-Isopropyltoluene	ND	500
sec-Butylbenzene	ND	500
tert-Butylbenzene	ND	500
Allyl chloride	ND	500
Benzyl chloride	ND	500
Epichlorohydrin	ND	10000
Isoprene	ND	500
Methyl methacrylate	ND	500
n-Pentane	ND	500
Allyl alcohol	ND	100000
2-Octanol	ND	1000
2-Octanone	ND	500
Ethyl Acrylate	ND	500
Butyl Acrylate	ND	500
Butyl Methacrylate	ND	500
Ethyl methacrylate	ND	500
Ethanol	ND	50000

Client ID: JV318

Site:

Lab Sample No: JV318

Lab Job No: Z294

Matrix: ORGANIC Date Sampled: Date Sampled:
Date Received:
Date Analyzed: 11/14/06 Level: HIGH

Sample Weight: 5.0 g Methanol Ext. Volume: 10.0 ml

GC Column: Rtx-VMS Instrument ID: VOAMS8.i Ext. Dilution Factor: 50.0

Lab File ID: j70251.d % Moisture: 0

	Analytical Results	Quantitation
	Units: ug/kg	Limit
<u>Parameter</u>	(Dry Weight)	<u>Units: ug/kg</u>
Methyl Acetate	ND	500
Methyl cyclohexane	ND	500
Cyclohexanone	ND	10000
p-Ethyltoluene	ND	500
1,4-Diethylbenzene	ND	500
1,2,4,5-Tetramethylbenzene	ND	500
Propylene Oxide	ND	5000
Camphene (total)	ND	2000
Camphor	ND	2000
Amyl Acetate	ND	1000
2-Methylnaphthalene	ND	500
1-Chlorohexane	ND	500
Chlorotrifluoromethane	ND	500
Chlorodifluoromethane	ND	500
tert-Amylmethyl Ether	ND	500
Iodomethane	ND	500
trans-1,4-Dichloro-2-butene	ND	500
Acetaldehyde	ND	1000
1,3,5-Trichlorobenzene	ND	500
1,2-Dichlorotrifluoroethane	ND	500
1-Bromo-2-chloroethane	ND	500
4-Chlorobenzotrifluoride	ND	500
2-Chloropropene	ND	500
tert-Butyl ethyl ether	ND	500
1,3-Butadiene	ND	500

Client ID: JV318

Site:

Lab Sample No: JV318

Lab Job No: Z294

Date Sampled:
Date Received:
Date Analyzed: 11/14/06
GC Column: Rtx-VMS
Instrument ID: VOAMS8.i
Lab File ID: j70251.d

Matrix: ORGANIC Level: HIGH Sample Weight: 5.0 g

Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 50.0

% Moisture: 0.0

#### VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 8260B

COMPOUND NAME	RT	EST. CONC. ug/kg	Q 
1NO VOLATILE ORGANIC COMPOUNDS FOUND			
2			-
J	-		
	-		
<u> </u>	-		
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49	_		
30.	_	i	

TOTAL ESTIMATED CONCENTRATION 0.0

Data File: /chem/VOAMS8.i/8260HIGH SP/10-24-06/14nov06.b/j70251.d

Report Date: 17-Nov-2006 23:08

#### STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file: /chem/VOAMS8.i/8260HIGH SP/10-24-06/14nov06.b/j70251.d

Client Smp ID: JV318 Lab Smp Id: JV318

Inj Date : 14-NOV-2006 17:43 Operator : VOAMS 3 Smp Info : JV318 Inst ID: VOAMS8.i

Misc Info : Comment

: /chem/VOAMS8.i/8260HIGH SP/10-24-06/14nov06.b/8260H 06.m Method

Meth Date : 14-Nov-2006 16:24 eddie Quant Type: ISTD Cal Date : 24-OCT-2006 21:17 Cal File: j69791.d Als bottle: 4 QC Sample: BLANK

Dil Factor: 50.00000

Integrator: HP RTE Compound Sublist: all.sub

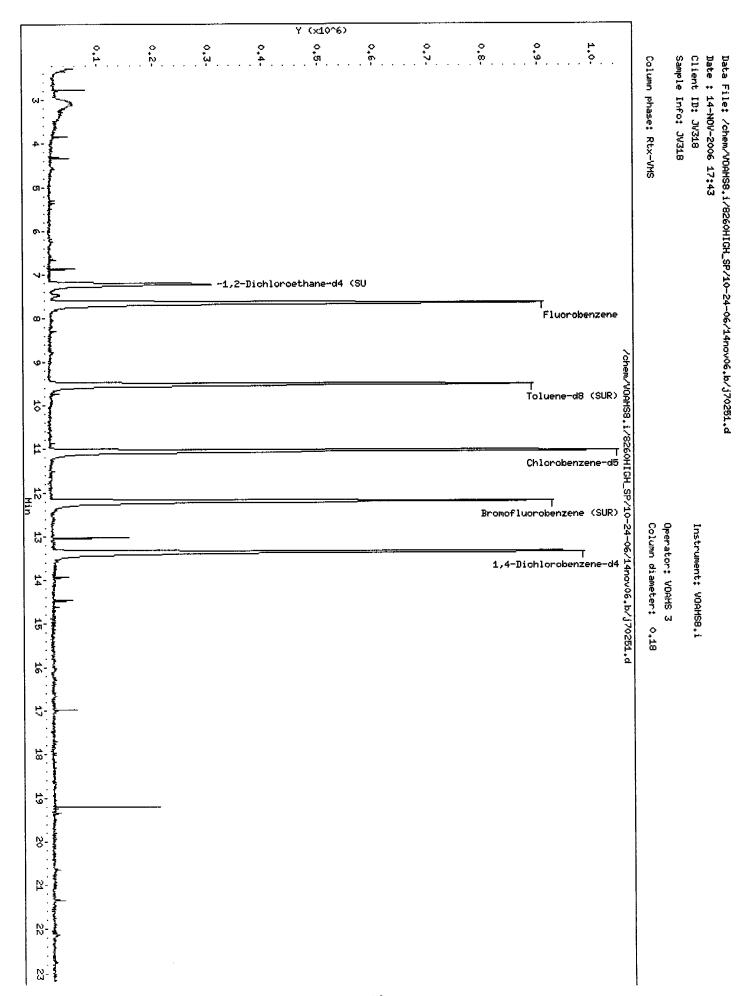
Target Version: 3.50

Concentration Formula: Amt \* DF \* (Vt/Ws)/((100-M)/100) \* CpndVariable

Name	Value	Description
DF	50.00000	Dilution Factor
Vt	10.00000	Volume of final extract (mL)
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

Cpnd Variable Local Compound Variable

					CONCENTRA	ATIONS
	QUANT SIG				ON - COLUMN	FINAL
Compounds	MASS	RT	EXP RT REL RT	RESPONSE	( ug/L)	(ug/Kg)
	====	==		******	*****	*****
\$ 16 1,2-Dichloroethane-d4 (SUR)	65	7.236	7.226 (0.945)	409002	40.2222	4000
* 19 Fluorobenzene	96	7.653	7.660 (1.000)	1926619	50.0000	
\$ 37 Toluene-d8 (SUR)	98	9.514	9.511 (0.861)	1197669	50.3651	5000
* 32 Chlorobenzene-d5	117	11.047	11.040 (1.000)	1328660	50.0000	
\$ 41 Bromofluorobenzene (SUR)	174	12.185	12.183 (0.912)	599009	60.3993	6000
* 91 1,4-Dichlorobenzene-d4	152	13.358	13.357 (1.000)	629033	50.0000	



Calibration Summary

Instrument ID: VOAMS8 Calibration Date(s): 10/24/06 10/24/06

LAB FILE ID: RRF5: J69791 RRF10: J69785 RRF20: J69786 RRF50: J69787 RRF100: J69788						
COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF100	
Chloromethane	0.274	0.308	0.285	0.283	0.292	
Bromomethane	0.314	0.329	0.273			
Vinyl Chloride	0.254	0.280	0.279			
Chloroethane	0.201	0.204				
Chloroethane Methylene Chloride	0.332	0.305				
Acetone	0.023	0.022	0.019			
Carbon Disulfide	0.938	0.776				
Trichlorofluoromethane	0.431	0.512	0.477			
1,1-Dichloroethene	0.313	0.250				
1,1-Dichloroethane	0.707					
trans-1,2-Dichloroethene	0.351	0.313	0.289	0.319		
cis-1,2-Dichloroethene	0.360	0.320	0.300	0.331		
Chloroform	0.652	0.609				
1,2-Dichloroethane	0.334	0.328		0.341		
2-Butanone	0.022	0.027				
1,1,1-Trichloroethane	0.483	0.422				
Carbon Tetrachloride	0.415	0.374		0.406		
Bromodichloromethane	0.574	0.547				
1,2-Dichloropropane	0.453	0.367	0.346			
cis-1,3-Dichloropropene	0.554					
Trichloroethene	0.386	0.335		0.347		
Dibromochloromethane	0.556			0.619		
1,1,2-Trichloroethane	0.389			0.373		
Benzene	1.013	0.881	0.818	0.912		
trans-1,3-Dichloropropene	0.542			0.574		
2-Chloroethyl Vinyl Ether	0.213	0.205		0.223		
Bromoform_	0.333	0.352	0.347			
4-Methyl-2-Pentanone	0.424	0.366		0.376		
2-Hexanone	0.253	0.212	0.230	0.273		
Tetrachloroethene	0.487			0.466		
1,1,2,2-Tetrachloroethane	1.458			1.209		
Toluene	1.186	1.055		1.171		
Chlorobenzene	0.894	0.783		0.866		
Ethylbenzene	0.368	0.318				
Styrene	0.778					
Styrene (Total) Ethor	0.494	0.443				
Eculy Ecuer	0.298	0.235				
Acrolein	0.002	0.002	0.002	0.002		
AcroleinFreon TF	0.626	0.506	0.487	0.512	0.518	

Instrument ID: VOAMS8 Calibration Date(s): 10/24/06 10/24/06

LAB FILE ID: RRF5: J69791 RRF10: J69785 RRF20: J69786 RRF50: J69787 RRF100: J69788					
COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF100
Isopropanol	=======	=======	=======	=======	=======
7 - 1 1 1	0.023	0.020	0.019	0.023	0.024
TBA	0.023	0.030	0.026	0.023	0.028
Acrylonitrile	0.032	0.084	0.076	0.084	0.087
MTBE	0.920	0.742	0.706	0.769	0.748
	0.920	0.742	0.700	0.705	0.740
Hexane	1.734	1.371	1.290	1.395	1.360
Ethyl Acetate	0.042	0.040	0.032	0.040	
	1.032	0.863	0.805	0.840	0.846
Vinyl Acetate	1.032	0.003	0.605	0.640	0.040
Tetrahydrofuran	0.500	0.429	0.400	0.437	0.425
Cyclohexane	0.500	0.429	0.400	0.437	0.425
Isobutanol	l <del></del> [	0.702	0.712	0.810	0.791
Isopropyl Acetate	0.942	0.793	0.712	0.810	0.791
n-Heptane					
n-Butanol					- 606
Propyl Acetate	0.770	0.670	0.586	0.646	
Butyl Acetate	0.978	0.812	0.773	0.946	
1,2-Dibromoethane	0.544	0.516	0.519	0.591	
1,3-Dichlorobenzene	1.131	1.036	1.014	1.019	
1,4-Dichlorobenzene	1.611	1.395	1.257	1.450	1.410
1,2-Dichlorobenzene	1.325	1.178	1.095	1.150	1.194
Naphthalene	0.848	1.166	1.029	1.188	1.260
Methylnaphthalene (total)					
Dimethylnaphthalene (total)					
Dichlorodifluoromethane	0.273	0.301		0.286	
1,1-Dichloropropene	0.407	0.418		0.443	
1,2,4-Trichlorobenzene	0.454	0.548	0.515	0.596	0.647
Hexachlorobutadiene	0.351	0.315	0.316	0.335	
1,4-Dioxane	0.003	0.003	0.003	0.003	0.003
Methyl Acrylate			:		
1,1,1,2-Tetrachloroethane	0.433	0.389	0.410	0.444	0.466
1,2,3-Trichlorobenzene	0.381	0.464	0.449	0.493	0.514
1,2,3-Trichloropropane	0.354	0.332		0.309	
1,2,4-Trimethylbenzene	1.940	1.657		1.686	
1,2-Dibromo-3-chloropropane	0.214	0.248	0.210	0.221	0.236
1,3,5-Trimethylbenzene	1.995	1.689		1.644	
1,3-Dichloropropane	0.734	0.605		0.690	0.71
2,2-Dichloropropane	0.490	0.423	0.389		
2-Chlorotoluene	2.032	1.781	1.674	1.869	1.597
z-Cirrorocordene	4.032	1./01	1.0/4	1.005	1.35
	l		l	l	l

Instrument ID: VOAMS8 Calibration Date(s): 10/24/06 10/24/06

LAB FILE ID: RRF5: J69791 RRF10: J69785 RRF20: J69786 RRF50: J69787 RRF100: J69788							
COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF100		
4-Chlorotoluene	2.273	2.133	1.934	2.012	2.182		
Bromobenzene	0.936	0.780					
Bromochloromethane	0.235	0.218			0.224		
DibromomethaneIsopropylbenzene	0.329	0.284			0.311		
Isopropylbenzene	1.248	1.087					
n-Butylbenzene	1.535	1.327		1.455			
n-Propylbenzene	2.809	2.287		2.478	2.488		
p-Isopropyltoluene	1.930	1.744	1.667	1.714			
sec-Butylbenzene	2.447	2.214	2.000	2.126			
tert-Butylbenzene	2.024	1.718	1.609	1.707	1.727		
Allyl chloride							
Benzyl chloride	1.439	1.347		1.350			
Epichlorohydrin	0.039	0.037					
Isoprene	0.353	0.289	0.279	0.300	0.297		
Methyl methacrylate	0.272	0.252	0.220	0.248	0.252		
n-PentaneAllyl alcohol	0.051	0.039	0.037	0.044	0.042		
Allyl alcohol							
2-Octanol							
2-Octanone							
Ethyl Acrylate							
Butyl Acrylate							
Butyl Methacrylate							
Ethyl methacrylate				!			
Ethanol	0.512	0.399	0.359	0.414	0.416		
Methyl Acetate	0.512	0.399	0.359	0.414	0.416		
Methyl cyclohexane	0.354	0.284	0.287	0.299	0.296		
Cyclohexanone p-Ethyltoluene							
1,4-Diethylbenzene							
1,2,4,5-Tetramethylbenzene				. ———			
Propylene Oxide							
Camphene (total)				<del></del>			
Camphere (total)							
Amyl Acetate							
2-Methylnaphthalene							
1-Chlorohexane							
Chlorotrifluoromethane							
Chlorodifluoromethane							
tert-Amylmethyl Ether							

Instrument ID: VOAMS8

Calibration Date(s): 10/24/06 10/24/06

LAB FILE ID: RRF5: J69791 RRF10: J69785 RRF20: J69786 RRF50: J69787 RRF100: J69788								
COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF100			
Iodomethane								
trans-1,4-Dichloro-2-butene_								
Acetaldehyde								
1,3,5-Trichlorobenzene								
1,2-Dichlorotrifluoroethane_								
1-Bromo-2-chloroethane 4-Chlorobenzotrifluoride								
2-Chloropropene				<del></del>				
tert-Butyl ethyl ether								
1,3-Butadiene								
	=======	=======	=======	=======	=======			
1,2-Dichloroethane-d4 (SUR)	0.332	0.217	0.247	0.262	0.264			
Toluene-d8 (SUR)	0.970	0.750	0.886					
Bromofluorobenzene (SUR)	0.927	0.727	0.777	0.752	0.774			

Calibration Date(s): 10/24/06 10/24/06 Instrument ID: VOAMS8

Calibration Time(s): 1456 2117 Heated Purge: (Y/N) N

!			COEFFICENT	%RSD
COMPOUND	RRF200	CURVE	A1	OR R^2
	i		=======================================	
Chloromethane	0.286		0.28785123	3.9**
Bromomethane			0.29011632	8.6*
inyl Chloride	0.271		0.27366376	4.1*
Chloroethane	0.194		0.19800854	2.1*
Chloroethane	0.320		0.31478426	5.0*
Acetone	0.024		0.02223800	7.1*
Carbon Disulfide	0.804		0.81209470	8.3*
richlorofluoromethane	0.463		0.47608005	5.9*
,1-Dichloroethene	0.262		0.26659696	9.8*
,1-Dichloroethane	0.636		0.63449336	7.1**
,1-Dichloroethane	0.322		0.32122754	
cis-1,2-Dichloroethene	0.333		0.33061622	6.0*
Chloroform	0.610		0.60971786	
,2-Dichloroethane	0.332		0.33080433	4.7*
B-Butanone	0.033		0.02832845	14.8*
2-Butanone 1,1,1-Trichloroethane	0.446	AVRG	0.44232719	6.5*
Carbon Tetrachloride Bromodichloromethane	0.409	AVRG	0.39985420	6.2*
Bromodichloromethane	0.588		0.56348619	6.4*
,2-Dichloropropane	0.388	AVRG	0.38901208	9.2*
cis-1,3-Dichloropropene	0.522		0.51847780	5.9*
Trichloroethene	0.366	AVRG	0.35239196	7.5*
Dibromochloromethane	0.618	AVRG	0.57859364	9.5*
1,1,2-Trichloroethane	0.362	AVRG	0.35864675	7.7*
Benzene		AVRG		7.1*
rans-1,3-Dichloropropene	0.566	AVRG	0.54257173	8.0*
2-Chloroethyl Vinyl Ether		AVRG	0.21276940	8.8*
Bromoform		AVRG		12.9**
-Methyl-2-Pentanone		AVRG		7.9*
2-Hexanone	0.300	AVRG	0.26045032	13.4*
2-Hexanone Tetrachloroethene		AVRG	0.45674636	8.5*
1,1,2,2-Tetrachloroethane		AVRG	1.24566368	9.4**
Toluene		AVRG	1.14907024	6.1*
Chlorobenzene			0.85332914	6.3**
Ethylbenzene		AVRG	0.36779149	9.7*
Styrene		AVRG	0.78175707	8.9*
Styrene Kylene (Total) Ethyl Ether		AVRG	0.48599923	6.4*
Ethyl Ether		AVRG	0.24533990	11.3*
Acrolein		AVRG	0.00195323	10.2*
Freon TF	0.486		0.52230778	10.0*

<sup>\*</sup> Compound with required maximum % RSD value.
\*\* Compound with required minimum RRF value.

Instrument ID: VOAMS8 Calibration Date(s): 10/24/06 10/24/06

-			COEFFICENT	%R\$D
COMPOUND	RRF200	CURVE	A1	OR R^2
Toopwonenel	<b>=</b> =======	1	=======	=======
IsopropanolAcetonitrile	0.025	AVRG	0.0000500	100
TBA	0.025		0.02223503	10.0
Acrylonitrile	0.029		0.02916759	7.3 7.4
MTBE	0.088		0.08211552	7.4 9.9
Hexane	0.734	AVRG	0.76986924	9.9
DIDD	1.345	AVEC	1.41568520	11.3
Ethyl Acetate	0.039		0.03839405	8.9
· · · · · · · · · · · · · · · · · · ·	0.039		0.86261746	10.1
Vinyl Acetate Tetrahydrofuran	0.790		0.86261746	10.1
Cyal choyano	0.412	AVRG	0.43372845	8.0
CyclohexaneIsobutanol	0.412	AVRG	0.433/2845	8.0
Isopropyl Acetate	0.780	AVKG	0.80460424	9.3
n-Heptane	0.780	AVRG	0.80460424	9.3
n-Heptanen-Butanol		AVRG		
Propyl Acetate	0.603	AVRG	0.65028874	10.1
Butyl Acetate	0.803			9.4
1,2-Dibromoethane	0.898		0.89399179	9.4 7.5
1,2-Diblomoethane 1,3-Dichlorobenzene	1.048		0.56329861 1.06385273	7.5 5.2
1,4-Dichlorobenzene	1.048		1.43326437	8.0
l,2-Dichlorobenzene		Į.		8.0 6.5
Vaphthalene	1.161		1.18381835	
Methylnaphthalene (total)	1.288	AVRG	1.13010064	14.6
Dimethylnaphthalene (total)				
Dichlorodifluoromethane		AVRG	0.00700045	
1,1-Dichloropropene	0.279 0.447		0.28790245	
1,2,4-Trichlorobenzene	0.447		0.42719389	
Hexachlorobutadiene			0.56923136	13.8
1,4-Dioxane	0.323 0.003		0.32926990 0.00317869	4.2° 3.9°
Methyl Acrylate	0.003	AVRG	0.0031/869	3.9
1,1,1,2-Tetrachloroethane	0.450		0.43192760	6.5
1,2,3-Trichlorobenzene	0.450		0.46931229	10.8
1,2,3-Trichloropenzene	0.313		0.31353450	8.3
1,2,4-Trimethylbenzene	1.676		1.71764037	6.8
1,2-Dibromo-3-chloropropane	0.224		0.22555909	6.4
1,3,5-Trimethylbenzene	1.630		1.70501760	8.7
1,3-Dichloropropane	0.684		0.67373023	7.6
2,2-Dichloropropane	0.884		0.42081041	7.6 8.6
2-Chlorotoluene	1.606		1.75987999	9.6
2 CHIOLOCOLUCIIC	1.000	AVKG	1.73307333	9.0
		l		

<sup>\*</sup> Compound with required maximum % RSD value.
\*\* Compound with required minimum RRF value.

Instrument ID: VOAMS8 Calibration Date(s): 10/24/06 10/24/06

Calibration Time(s): 1456 2117 Heated Purge: (Y/N) N

COMPOUND	RRF200	CURVE	COEFFICENT A1	%RSD OR R^2
		=====	=======	
4-Chlorotoluene	2.097	AVRG	2.10491086	
Bromobenzene	0.783	AVRG	0.79892347	
Bromochloromethane	0.215	AVRG	0.21642086	
Dibromomethane	0.302	AVRG	0.30055555	
Isopropylbenzene	1.229	AVRG	1.21558054	
n-Butylbenzene	1.495	AVRG	1.44768248	6.2*
n-Propylbenzene	2.458	AVRG	2.47434096	7.4*
p-Isopropyltoluene	1.695	AVRG	1.75496552	5.4*
sec-Butylbenzene	2.083	AVRG	2.17403042	7.0*
tert-Butylbenzene	1.661	AVRG	1.74108908	8.4*
Allyl chloride		AVRG		
Benzyl chloride	1.319	AVRG	1.32990354	5.7*
Epichlorohydrin	0.038		0.03729554	S 2★
<u> </u>	0.287	AVRG	0.30080878	8.8*
Isoprene Methyl methacrylate	0.249		0.24890476	6.8*
The second secon	0.040		0.04232244	
Allyl alcohol		AVRG		1
2-Octanol		AVRG		
2-Octanone		AVRG		
Ethyl Acrylate		AVRG		
Butyl Acrylate		AVRG		
Butyl Methacrylate		AVRG		
Ethyl methacrylate		AVRG		
Ethanol		AVRG		
Methyl Acetate	0.416	AVRG	0.41947715	12.0*
Methyl cyclohexane	0.287		0.30110566	8.8*
Cyclohexanone		AVRG		
o-Ethyltoluene		AVRG		
1,4-Diethylbenzene		AVRG		
1,2,4,5-Tetramethylbenzene		AVRG		
Propylene Oxide		AVRG		
Camphene (total)		AVRG		
Camphor		AVRG		
Amyl Acetate		AVRG		
2-Methylnaphthalene		AVRG		
1-Chlorohexane		AVRG		
Chlorotrifluoromethane		AVRG		
Chlorodifluoromethane		AVRG		
tert-Amylmethyl Ether	I	AVRG		

<sup>\*</sup> Compound with required maximum % RSD value.
\*\* Compound with required minimum RRF value.

Instrument ID: VOAMS8 Calibration Date(s): 10/24/06 10/24/06

RF200: J69789					
COMPOUND	RRF200	CURVE	COEFFICENT A1	%RSD OR R^2	
Iodomethane trans-1,4-Dichloro-2-butene Acetaldehyde 1,3,5-Trichlorobenzene 1,2-Dichlorotrifluoroethane 1-Bromo-2-chloroethane 4-Chlorobenzotrifluoride 2-Chloropropene tert-Butyl ethyl ether 1,3-Butadiene		AVRG AVRG AVRG AVRG AVRG AVRG AVRG AVRG			
1,2-Dichloroethane-d4 (SUR)_ Toluene-d8 (SUR)_ Bromofluorobenzene (SUR)_	0.262 0.910 0.771	===== AVRG AVRG	0.26389653 0.89487762 0.78831118	14.3* 8.5* 9.0*	

<sup>\*</sup> Compound with required maximum % RSD value.
\*\* Compound with required minimum RRF value.

Instrument ID: VOAMS8 Calibration Date: 11/14/06 Time: 1608

Lab File ID: J70248 Init. Calib. Date(s): 10/24/06 10/24/06

Init. Calib. Times: 1456 2117

		RRF50.000				
COMPOUND	RRF OR	OR	MIN	%D OR	MAX %D OR	CURY
	AMOUNT	AMOUNT	RRF	,	%DRIFT	TYPI
	<b>¦</b>	:	=====	======		İ ====
Chloromethane	0.2880000	0.2251438	0.1	21.82	50.00	AVRO
Bromomethane	0.2900000	0.2493893	İ	14.00	,	AVRO
Vinyl Chloride	0.2740000	0.2259958		17.52	20.00	AVRO
Chloroethane	0.1980000	0.1665906		15.86	50.00	AVRO
Methylene Chloride	0.3150000	0.2663326		15.45		AVRO
Acetone	0.0220000	0.0177490		19.32	50.00	AVRO
Carbon Disulfide	0.8120000	0.6596128	į	18.77	50.00	AVRO
Trichlorofluoromethane	0.4760000	0.4253398	İ	10.64	50.00	AVRO
1,1-Dichloroethene	0.2670000	0.2280279	ĺ	14.60	20.00	AVRO
1,1-Dichloroethane	0.6340000	0.5188456	0.1	18.16	50.00	AVRO
trans-1,2-Dichloroethene	0.3210000	0.2875209	ĺ	10.43	50.00	AVRO
cis-1,2-Dichloroethene	0.3300000	0.2956688	ĺ	10.40	50.00	AVRO
Chloroform	0.6100000	0.5057086		17.10	20.00	AVRO
1,2-Dichloroethane	0.3310000	0.2711728	Ì	18.07		AVRO
2-Butanone	0.0280000	0.0227362	-	18.80	50.00	AVRO
1,1,1-Trichloroethane		0.3929261		11.10	50.00	AVRO
Carbon Tetrachloride		0.3571737		10.71		
Bromodichloromethane	0.5630000	0.4757993		15.49	50.00	AVR
1,2-Dichloropropane	0.3890000	0.3192699	ĺ	17.92	20.00	AVRO
cis-1,3-Dichloropropene	0.5180000	0.4334725	ĺ	16.32	50.00	AVRO
Trichloroethene	0.3520000	0.3054326	ĺ	13.23	50.00	AVRO
Dibromochloromethane	0.5780000	0.5628042	ĺ	2.63	50.00	AVRO
1,1,2-Trichloroethane	0.3580000	0.3069209	ĺ	14.27	50.00	AVRO
Benzene	0.9150000	0.7620288		16.72	50.00	AVRO
trans-1,3-Dichloropropene	0.5420000	0.4909050		9.43		AVRO
2-Chloroethyl Vinyl Ether	0.2130000	0.1830126		14.08		
Bromoform		0.3892356				AVRO
4-Methyl-2-Pentanone_	0.3730000	0.2762961		25.92	50.00	AVRO
2-Hexanone	0.2600000	0.2148139		17.38	50.00	AVRO
Tetrachloroethene	0.4570000	0.4460104	ĺ	2.40	50.00	AVRO
1,1,2,2-Tetrachloroethane	1.2460000	1.0282721	0.3	17.47	50.00	AVRO
Toluene	1.1490000	1.0696008	İ	6.91	20.00	AVRO
Chlorobenzene	0.8530000	0.8025929	0.3			AVR
Ethylbenzene	0.3680000	0.3504631	Ì	4.76	20.00	AVR
Styrene	0.7820000	0.7411093	1	5.23	50.00	AVRO
Xylene (Total)	0.4860000	0.4598737		5.38	50.00	AVR
Ethyl Ether	_ 0.2450000	0.1879510		23.28	50.00	AVR
Acrolein	[ 0.0020000	0.0028263		-41.32	99.00	AVR
Freon TF	0.5220000	0.4654783	İ	10.83	50.00	AVR
Isopropanol	0.0000000		ĺ	0.00	50.00	AVR
Acetonitrile		0.0173243	İ	21.25		i .
TBA	- '	0.0176721		39.06		!

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Instrument ID: VOAMS8 Calibration Date: 11/14/06 Time: 1608

Lab File ID: J70248 Init. Calib. Date(s): 10/24/06 10/24/06

Init. Calib. Times: 1456 2117

	i <u></u>	RRF50.000				
COMPOUND	RRF OR	OR	MIN	%D OR	MAX %D OR	CURV
	AMOUNT	AMOUNT	RRF	%DRIFT	%DRIFT	TYPE
=======================================		=======	=====		=======	====
Acrylonitrile	0.0820000	0.0625199		23.76		AVRG
MTBE	0.7700000	0.6522267		15.30	50.00	AVRG
Hexane	0.0000000			0.00	50.00	AVRC
DIPE		1.1704495		17.34		
Ethyl Acetate		0.0302288		20.45		
Vinyl Acetate		0.7853474		9.00	τ	
Tetrahydrofuran	0.0000000			0.00		
Cyclohexane	0.4340000	0.3529040		18.68	!	,
Isobutanol	0.0000000			0.00		
Isopropyl Acetate	0.8050000	0.6175716		23.28		
n-Heptane	0.0000000			0.00		
n-Butanol	0.0000000			0.00		
Propyl Acetate		0.4602749		29.19	•	,
Butyl Acetate	!	0.7168653		19.81		
1,2-Dibromoethane	!	0.5039180		10.49		:
1,3-Dichlorobenzene	•	1.1018733		-3.56		
1,4-Dichlorobenzene		1.3465570		6.03	!	
1,2-Dichlorobenzene	1	1.1431794		3.45		
Naphthalene		0.9555002		15.44	•	
Methylnaphthalene (total)	0.0000000			0.00		
Dimethylnaphthalene (total)_	0.0000000			0.00		
Dichlorodifluoromethane		0.2610446		9.36		
1,1-Dichloropropene		0.3721086		12.86		
1,2,4-Trichlorobenzene	•	0.5326374	!	6.39		
Hexachlorobutadiene	,	0.3250751		1.19		,
1,4-Dioxane	!	0.0021114		29.62		
Methyl Acrylate	0.0000000	2 200000		0.00		
1,1,1,2-Tetrachloroethane	0.4320000			7.66		
1,2,3-Trichlorobenzene	1	0.4303220		8.25	•	
1,2,3-Trichloropropane	1	0.2664380		14.88		
1,2,4-Trimethylbenzene		1.5774345		8.18	1	
1,2-Dibromo-3-chloropropane_		0.1658297		26.62		
1,3,5-Trimethylbenzene	1	1.5674376		8.07	•	
1,3-Dichloropropane	I	0.5792256		14.06		
2,2-Dichloropropane	l	0.3570894		15.18	1	
2-Chlorotoluene	1	1.2679690		27.96	1	•
4-Chlorotoluene	•	1.9347500	:	8.09		
Bromobenzene		0.7788246		2.52	,	•
Bromochloromethane	!	0.1916024	!	11.30		
Dibromomethane	1	0.2559036	•	14.70	•	
<pre>Isopropylbenzene n-Butylbenzene</pre>	!	1.1409654		6.17	1	
n-Bury I benzene	11 4480000	1.3769468	1	4.91	50.00	TAVRO

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Instrument ID: VOAMS8 Calibration Date: 11/14/06 Time: 1608

Lab File ID: J70248 Init. Calib. Date(s): 10/24/06 10/24/06

Init. Calib. Times: 1456 2117

		RRF50.000				
COMPOUND	RRF OR	OR	MIN	%D OR	MAX %D OR	CURV
	AMOUNT	AMOUNT	RRF	%DRIFT	%DRIFT	TYPE
=======================================		=======	=====	ı	=======	
n-Propylbenzene	1	2.2935364	,	7.29	•	
p-Isopropyltoluene	1.7550000	1.6333657		6.93		
sec-Butylbenzene	2.1740000		:	5.89		
tert-Butylbenzene	1.7410000			8.06		
Allyl chloride	0.0000000			0.00	1	
Benzyl chloride	1	1.2765028	•	4.02		
Epichlorohydrin		0.0269354		27.20		,
Isoprene	1	0.2549248	•	15.31		
Methyl methacrylate		0.1985269	•	20.27		
n-PentaneAllyl alcohol		0.0382603		8.90		
Allyl alcohol	0.0000000		ļ	0.00		
2-Octanol	0 0000000		ļ	0.00		
2-Octanone	0.0000000		ļ	0.00		
Ethyl Acrylate	0.0000000		<u> </u>	0.00	•	
Butyl Acrylate	0.0000000		•	0.00		
Butyl Methacrylate	0.0000000			0.00	!	
Ethyl methacrylate	0.0000000	· ————	ļ	0.00		
Ethanol	0.0000000		ļ	0.00	•	
Methyl Acetate		0.2881782		31.22		
Methyl cyclohexane	0.3010000	!	ļ	9.21		
Cyclohexanone	0.0000000			0.00		
p-Ethyltoluene	0.0000000			0.00	)	
1,4-Diethylbenzene	0.0000000		]	0.00		
1,2,4,5-Tetramethylbenzene	0.0000000			0.00		
Propylene Oxide Camphene (total)	0.0000000	,		0.00		
	0.0000000			0.00		
Camphor	0.0000000		ļ	0.00	1	
Amyl Acetate	0.0000000	!	[	0.00		
2-Methylnaphthalene	0.0000000		1	0.00		
1-Chlorohexane	0.0000000			0.00		
Chlorotrifluoromethane	0.0000000			0.00		
Chlorodifluoromethane	0.0000000	! — — —	ļ	0.00		
tert-Amylmethyl Ether	0.0000000		ļ	0.00	!	:
Iodomethane	0.0000000		-	0.00	!	
trans-1,4-Dichloro-2-butene_		!	ļ	0.00	!	,
Acetaldehyde	0.0000000	!		0.00	1	•
1,3,5-Trichlorobenzene	0.0000000		!	0.00	50.00	:
1,2-Dichlorotrifluoroethane_	0.0000000			0.00	1	!
1-Bromo-2-chloroethane	0.0000000			0.00	!	!
4-Chlorobenzotrifluoride	0.0000000			0.00	ł.	:
2-Chloropropene	0.0000000	!	0 07	0.00		•
tert-Butyl ethyl ether	0.0000000	ļ <del></del>	0.01	0.00	50.00	AVRO
	.	l		l	l	l

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Instrument ID: VOAMS8 Calibration Date: 11/14/06 Time: 1608

Lab File ID: J70248 Init. Calib. Date(s): 10/24/06 10/24/06

Init. Calib. Times: 1456 2117

COMPOUND	RRF OR AMOUNT	RRF50.000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
  1,3-Butadiene	0.0000000	=======	0.01	0.00	50.00	====   AVRG
1,2-Dichloroethane-d4 (SUR)   Toluene-d8 (SUR)	0.2640000	0.2247774 0.8338167	=====	14.86 6.84	50.00 50.00	, ,
		0.8353744		-4.74	!	! !

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Surrogate Compound Recovery Summary

### VOLATILE SYSTEM MONITORING COMPOUND RECOVERY METHOD 8260B

Matrix: ORGANIC Level: HIGH Lab Job No: Z294

	LAB	S1	S2	S3	OTHER	TOT
					OTUEK	OUT
	SAMPLE NO.	#	#	#	•	I I
		=====	=====	=====	=====	===
01	JV318	80	101	121		0
02	783079	71	690*	119		1
03	783079MS	86	584*	124		1
04	783079MSD	73	413*	96		1
05						
06						
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QC LIMITS
S1 = 1,2-Dichloroethane-d4 (60-142)
S2 = Toluene-d8 (52-153)
S3 = Bromofluorobenzene (62-138)

- # Column to be used to flag recovery values
- \* Values outside of contract required QC limits
- D System Monitoring Compound diluted out

page 1 of 1

Spike Recovery Summary

### VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY METHOD 8260B

Matrix: ORGANIC Matrix Spike - Lab Sample No.: 783079

Level: HIGH MS Sample from Lab Job No: Z294

QA Batch: 1084

	SPIKE	SAMPLE	MS	MS	QC.
	ADDED	CONCENTRATION	CONCENTRATION	એ	LIMITS
Compound	(ug/Kg)	(ug/Kg)	(ug/Kg)	REC #	REC.
	=======	=======================================	=========	=====	=====
Vinyl Chloride	50000	0.00	45000	90	60-151
1,1-Dichloroethene	50000	0.00	50000	100	71-132
Methylene Chloride	50000	0.00	48000	96	60-152
MTBE	50000	0.00	47000	94	70-130
1,1-Dichloroethane	50000	0.00	48000	96	65-138
Bromochloromethane	50000	0.00	51000	102	70-130
Chloroform	50000	0.00	48000	96	62-141
Benzene	50000	0.00	54000	108	62-136
Trichloroethene	50000	0.00	50000	100	62-134
1,2-Dichloropropane	50000	0.00	79000	158*	64-136
Toluene	50000	0.00	57000	114	60-138
Tetrachloroethene	50000	0.00	55000	110	58-137
Chlorobenzene	50000	0.00	56000	112	65-138
Ethylbenzene	50000	270000	300000	*	70-134
Isopropylbenzene	50000	530000	520000	*	70-130
1,3-Dichlorobenzene	50000	0.00	66000	132	63-139

	SPIKE	MSD	MSD			
	ADDED	CONCENTRATION	ક	용	QC L	IMITS
Compound	(ug/Kg)	(ug/Kg)	REC #	RPD #	RPD	REC.
	=======	======================================	=====	=====		=====
Vinyl Chloride	50000	42000	84	7	40	60-151
1,1-Dichloroethene	50000	42000	84	17	40	71-132
Methylene Chloride	50000	42000	84	13	40	60-152
MTBE	50000	39000	78	19	40	70-130
1,1-Dichloroethane	50000	43000	86	11	40	65-138
Bromochloromethane	50000	42000	84	19	40	70-130
Chloroform	50000	40000	80	18	40	62-141
Benzene	50000	45000	90	18	40	62-136
Trichloroethene	50000	44000	88	13	40	62-134
1,2-Dichloropropane	50000	65000	130	19	40	64-136
Toluene	50000	45000	90	24	40	60-138
Tetrachloroethene	50000	44000	88	22	4.0	58-137
Chlorobenzene	50000	44000	88	24	40	65-138
Ethylbenzene	50000	250000	*	*	40	70-134
Isopropylbenzene	50000	400000	*	*	40	70-130
1,3-Dichlorobenzene	50000	45000	90	38	40	63-139
						<u> </u>

<sup>#</sup> Column to be used to flag recovery and RPD values with an asterik

RPD: 2 out of 16 outside limits

Spike Recovery: 5 out of 32 outside limits

COMMENTS: Ethylbenzene and Isopropylbenzene sample amounts too high for spiking level. 1,2-Dichloropropane % recovery high due to sample matrix interference.

<sup>\*</sup> Values outside of QC limits

Internal Standard Area and RT Summary

#### VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J70248 Date Analyzed: 11/14/06

Instrument ID: VOAMS8 Time Analyzed: 1608

		TOI		Free (CDZ)		IS3 (DCB)	
		IS1	Dm #	IS2(CBZ)	RT #	AREA #	RT #
		AREA #	RT #	AREA #	RT #	AREA #	K1 #
		========	======	========	======	========	=====
	12 HOUR STD	2028002	7.66	1444092	11.04	766835	13.36
	UPPER LIMIT	4056004	8.16	2888184	11.54	1533670	13.86
	LOWER LIMIT	1014001	7.16	722046	10.54	383418	12.86
	=========	=======	======	=======	======	=======	======
	LABORATORY						
	SAMPLE NO.						
		========	======	=======	======	========	======
01	JV318	1926619	7.65	1328660	11.05	629033	13.36
02	783079	1969640	7.65	1333304	11.04	612048	13.34
03	783079MS	1875264	7.65	1327618	11.04	587987	13.35
04	783079MSD	1792052	7.66	1262251	11.04	598984	13.35
05							
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IS1 = Fluorobenzene

IS2 (CBZ) = Chlorobenzene-d5

IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT UPPER LIMIT = + 0.50 minutes of internal standard RT RT LOWER LIMIT = - 0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

page 1 of 1

This is the Last Page of the Document



02/05/2007

Trillium, Inc.-PA 28 Grace's Drive Coatesville, PA 19320 **STL Edison** 777 New Durham Road Edison, NJ 08817

Tel 732 549 3900 Fax 732 549 3679 www.stl-inc.com

Attention: Dr. James Smith Ph.D.

Laboratory Results
Job No. B620 - Sky Harbor

Dear Dr. Smith:

Enclosed are the results you requested for the following sample(s) received at our laboratory on January 8, 2007.

<u>Lab No.</u> <u>Client ID</u> <u>Analysis Required</u>

798091 ASE-107A-6D1 8260 Special

This report is not to be reproduced, except in full, without the written approval of the laboratory.

An invoice for our services is also enclosed. If you have any questions, please contact me at (732) 549-3900.

Very Truly Yours,

Michael Legg Project Manager



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Results Summary and Chromatograms	16 29 38 47

### **Analytical Results Summary**

Client ID: ASE-107A-6D1 Lab Sample No: **798091**Lab Job No: B620

Site: Sky Harbor

Date Sampled: 11/02/06 Matrix: WATER Level: LOW

Date Received: 01/08/07 Date Analyzed: 01/27/07 Purge Volume: 5.0 ml GC Column: Rtx-VMS Instrument ID: VOAMS2.i Dilution Factor: 1.0

Lab File ID: b47527.d

#### VOLATILE ORGANICS - GC/MS METHOD 8260B

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Quantitation Limit <u>Units: ug/l</u>
Chloromethane	ND	5.0
Bromomethane	ND	5.0
Vinyl Chloride	ND	5.0
Chloroethane	ND	5.0
Methylene Chloride	6.2	3.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	2.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,2-Dichloroethane	ND	2.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	2.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	1.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	3.0
Benzene	15	1.0
trans-1,3-Dichloropropene	ND	5.0
2-Chloroethyl Vinyl Ether	ND	5.0
Bromoform	ND	4.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Toluene	4.4J	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	69	4.0
Xylene (Total)	24	5.0
Freon TF	ND	5.0
TBA	ND	100
MTBE	5.3	5.0
1,3-Dichlorobenzene	ND	5.0

Client ID: ASE-107A-6D1 Lab Sample No: 798091

Site: Sky Harbor Lab Job No: B620

Date Sampled: 11/02/06 Matrix: WATER
Date Received: 01/08/07 Level: LOW
Date Analyzed: 01/27/07 Purge Volume: 5.0 ml
GC Column: Rtx-VMS Dilution Factor: 1.0

GC Column: Rtx-VMS Instrument ID: VOAMS2.i Lab File ID: b47527.d

<u>Parameter</u>	Analytical Result <u>Units: uq/l</u>	Quantitation Limit <u>Units: uq/l</u>
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Dichlorodifluoromethane	ND	5.0

### **General Information**

Chain of Custody

202

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Date/Time (1/02/04 /430 Fee CX	Lab co-ordination and final report by Dee	y Dee Sheppard, Trillium, Inc.	Inc. Wilmington, DE
Descrime World 1630 Fed CX	Company Lo for Condition	// Custody	Custody Seals Intact
	11/25/10	4/7	1/4
		Custody	Oustrody Seals Intact
Date/Time	c Cooler Temp.		
Preservatives: 0 = None; {1 = HCL ;  2 = HNO3 ;  3 = H3SO4 ;  4 = NaOH ;  5 = Zh. Acetatel;  6 = Me(H1:  7 = NaHSOA : = Tohar (remited.)		-	

**Laboratory Chronicles** 

#### INTERNAL CUSTODY RECORD AND LABORATORY CHRONICLE STL Edison

# 777 New Durham Road, Edison, New Jersey 08817

Job No:	B620	Site:	Sky Harbor	
Client:	Trillium, IncPA			
	VOAMS			

#### **WATER - 8260B**

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
798091	11/2/2006	1/8/2007			1/27/2007	Boykin, Kenneth	4743
			-				
			-				

Methodology Review

#### Analytical Methodology Summary

#### Volatile Organics:

Unless otherwise specified, water samples are analyzed for volatile organics by purge and trap GC/MS as specified in EPA Method 624. Drinking water samples are analyzed by EPA Method 524.2 Rev 4.1. Solid samples are analyzed for volatile organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8260B.

#### Acid and Base/Neutral Extractable Organics:

Unless otherwise specified, water samples are analyzed for acid and/or base/neutral extractable organics by GC/MS in accordance with EPA Method 625. Solids are analyzed for acid and/or base/neutral extractable organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8270C.

#### GC/MS Nontarget Compound Analysis:

Analysis for nontarget compounds is conducted, upon request, in conjunction with GC/MS analyses by EPA Methods 624, 625, 8260B and 8270C. Nontarget compound analysis is conducted using a forward library search of the EPA/NIH/NBS mass spectral library of compounds at the greatest apparent concentration (10% or greater of the nearest internal standard) in each organic fraction (15 for volatile, 15 for base/neutrals and 10 for acid extractables).

#### Organochlorine Pesticides and PCBs:

Unless otherwise specified, water samples are analyzed for organochlorine pesticides and PCBs by dual column gas chromatography with electron capture detectors as specified in EPA Method 608. Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8081A for organochlorine pesticides and Method 8082 for PCBs.

#### Total Petroleum Hydrocarbons:

Water samples are analyzed for petroleum hydrocarbons by I.R. using EPA Method 418.1. Solid samples are prepared for analysis by soxhlet extraction consistent with the March 1990 N.J. DEP "Remedial Investigation Guide" Appendix A, page 52, and analyzed by U.S. EPA Method 418.1

#### Metals Analysis:

Metals analyses are performed by any of four techniques specified by a Method Code provided on each data report page, as follows:

- P Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP)
- A Flame Atomic Absorption
- F Furnace Atomic Absorption
- CV Manual Cold Vapor (Mercury)

Water samples are digested and analyzed using EPA methods provided in "Methods for Chemical Analysis of Water and Wastewater" (EPA 600/4-79-020). Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition); samples are digested according to Method 3050B "Acid Digestion of Soil, Sediments and Sludges."

Specific method references for ICP analyses are water Method - 200.7/SW846 6010B and for solid matrix - 6010B. Mercury analyses are conducted by the manual cold vapor technique specified by water Method 245.1/7470A and solid Method 7471A. Other specific Atomic Absorption method references are as follows:

<u>Element</u>	Water Test Method <u>Furnace</u>	Solid Test Method Furnace
Antimony	200.9	7041
Arsenic	200.9	7060A
Cadmium	200.9	7131A
Lead	200.9	7421
Selenium	200.9	7740
Thallium	200.9	7841

#### Cyanide:

Water samples are analyzed for cyanide using EPA Method 335.3. Cyanide is determined in solid samples as specified in the EPA Contract Laboratory Program IFB dated July 1988, revised February 1989.

#### Phenols:

Water samples are analyzed for total phenols using EPA Method 420.2. Total phenols are determined in water and solid samples by preparing the sample as outlined in the EPA Contract Laboratory Program IFB for cyanide, followed by a phenols determination using EPA Method 420.1.

#### Hexavalent Chromium:

Water samples are analyzed using EPA Method 7196A, EPA Method 7199 or (upon request) USGS -1230-35. Soil samples are subjected to alkaline digestion via EPA Method 3060A prior to analysis by EPA Method 7196A or EPA Method 7199.

#### Cleanup of Semivolatile Extracts:

Upon request Method 3611B Alumina Column Cleanup and/or Method 3650B Acid-Base Partition Cleanup are performed to improve detection limits by the removal of saturated hydrocarbon interferences.

#### Hazardous Waste Characteristics:

Samples for hazardous waste characteristics are analyzed as specified in the U.S. EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition). Specific method references are as follows:

Ignitability - Method 1020A

Corrosivity - Water pH Method 9040B Soil pH Method 9045C

Reactivity - Chapter 7, Section 7.3.3 and 7.3.4 respectively for hydrogen cyanide and hydrogen sulfide release

Toxicity - TCLP Method 1311

#### Miscellaneous Parameters:

Additional analyses performed on both aqueous and solid samples are in accordance with methods published in the following references:

- Test Methods for Evaluating Solid Wastes, SW-846 3rd Edition, November 1986.
- Standard Methods for the Examination of Water and Wastewater, 18th Edition.
- Methods for Chemical Analysis of Water and Wastes,  $\mbox{EPA-600/4-79-020}$ , 1979.

Data Reporting Qualifiers

#### DATA REPORTING QUALIFIERS

- ND The compound was not detected at the indicated concentration.
  - J Mass spectral data indicates the presence of a compound that meets the identification criteria. The result is less than the specified detection limit but greater than zero. The concentration given is an approximate value.
  - B The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.
  - P For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
  - \* For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

Non-Conformance Summary



## **Nonconformance Summary**

STL Edison Job Number: <u>B620</u>

Client: <u>Trillium</u>, Inc.-PA

**Date:** 2/2/2007

#### Sample Receipt:

Sample delivery conforms with requirements.

#### **Volatile Organic Analysis (GC/MS):**

All data conforms with method requirements.

I certify that the test results contained in this data package meet all requirements of NELAC both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this package has been authorized by the Laboratory Director or their designee, as verified by the following signature.

Michael Legg Project Manager

## **GC/MS Forms and Data (Volatiles)**

Results Summary and Chromatograms

Lab Sample No: **798091** Lab Job No: B620 Client ID: ASE-107A-6D1

Site: Sky Harbor

Matrix: WATER Date Sampled: 11/02/06 Level: LOW Date Received: 01/08/07

Purge Volume: 5.0 ml Date Analyzed: 01/27/07 Dilution Factor: 1.0 GC Column: Rtx-VMS

Instrument ID: VOAMS2.i Lab File ID: b47527.d

#### VOLATILE ORGANICS - GC/MS METHOD 8260B

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Quantitation Limit <u>Units: uq/l</u>
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Trichlorofluoromethane 1,1-Dichloroethene 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene 2-Chloroethyl Vinyl Ether Bromoform Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Xylene (Total) Freon TF TBA	ND ND ND ND ND ND ND ND ND ND ND ND ND N	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0
MTBE 1,3-Dichlorobenzene	ND	5.0

Client ID: ASE-107A-6D1 Lab Sample No: 798091

Site: Sky Harbor Lab Job No: B620

Date Sampled: 11/02/06 Matrix: WATER
Date Received: 01/08/07 Level: LOW

Date Received: 01/08/07

Date Analyzed: 01/27/07

GC Column: Rtx-VMS

Dilution Factor: 1.0

Instrument ID: VOAMS2.i
Lab File ID: b47527.d

#### VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

Parameter	Analytical Result <u>Units: uq/l</u>	Quantitation Limit <u>Units: ug/l</u>
1,4-Dichlorobenzene 1,2-Dichlorobenzene Dichlorodifluoromethane	ND ND ND	5.0 5.0 5.0

Report Date: 30-Jan-2007 15:46

#### STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS2.i/8260HIGH\_SP/01-25-07/26jan07.b/b47527.d Client Smp ID: ASE-107A-6D1

Lab Smp Id: 798091

Inj Date : 27-JAN-2007 00:26 Inst ID: VOAMS2.i

Operator : VOAMS 3 Smp Info : 798091

Misc Info : B620;4743;;KLB

Method : /chem/VOAMS2.i/8260HIGH\_SP/01-25-07/26jan07.b/8260H\_06.m Meth Date : 26-Jan-2007 19:29 eddie Quant Type: ISTD Cal Date : 26-JAN-2007 00:10

Als bottle: 11

Dil Factor: 1.00000

Compound Sublist: PPDCBFMT.sub Integrator: HP RTE

Target Version: 3.50

Concentration Formula: Amt \* DF \* 5/Vo \* CpndVariable

Name	Value	Description		
DF Vo	1.00000	Dilution Factor SampleVolume		

Cpnd Variable

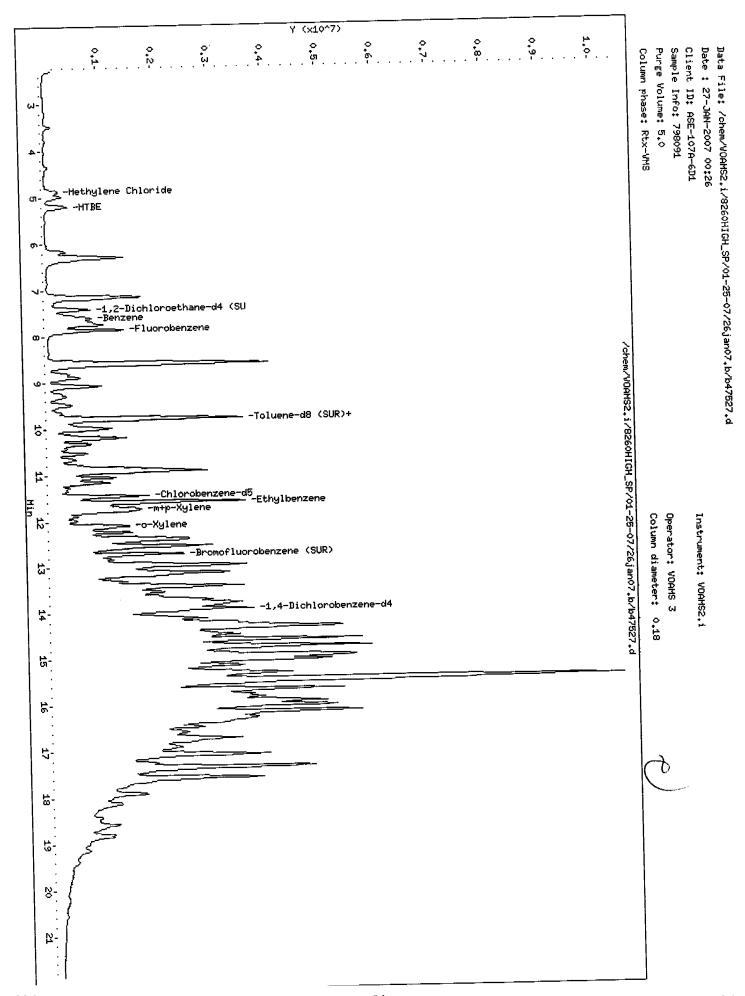
Local Compound Variable

					CONCENTRA	TIONS
	OVANUE CIC				ON-COLUMN	FINAL
	QUANT SIG MASS	RT	EXP RT REL RT	RESPONSE	( ug/L)	( ug/L)
Compounds	==== P16.55	<b>=</b> =	=======================================	=======	======	크로듀프트류
로듀 - 쓰로로 크로루 - 크로루 - 스트로 - 스트로 - 스트	84	4.853	4.838 (0.618)	112616	6.21348	6.2
6 Methylene Chloride	73	5.180	5.180 (0.659)	205325	5.28145	5.3
53 MTBE	· -	7.409	7.410 (0.943)	936069	47.5006	48
<pre>\$ 16 1,2-Dichloroethane-d4 (SUR)</pre>	65 <b>5</b> 0	7.528	7.528 (0.958)	671208	14.8302	15
28 Benzene	78	7.855	7.855 (1.000)	2933762	50.0000	
* 19 Fluorobenzene	96 98	9.787	9.787 (0.855)	2563716	49.5140	50
\$ 37 Toluene-d8 (SUR)	• •	9.876	9.877 (0.862)	248700	4.43043	4.4(a)
38 Toluene	91	11.451	11.452 (1.000)	2214598	50.0000	
* 32 Chlorobenzene-d5	117	11.585		1296674	68.8621	69
40 Ethylbenzene	106	11.704		461204	18.9162	19
43 m+p-Xylene	106	12.150		121514	5.32729	5.3
44 o-Xylene	106	12.715	- (+ 0.4)	1291877	48.5441	48
<pre>\$ 41 Bromofluorobenzene (SUR)</pre>	174	=		1217541	50.0000	
* 91 1,4-Dichlorobenzene-d4	152	13.904	13.304 (1.000)	582718	24.4249	24
M 45 Xylene (Total)	100					

Data File: /chem/VOAMS2.i/8260HIGH\_SP/01-25-07/26jan07.b/b47527.d Report Date: 30-Jan-2007 15:46

### QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).



Date : 27-JAN-2007 00:26

Client ID: ASE-107A-6D1

Sample Info: 798091

Purge Volume: 5.0

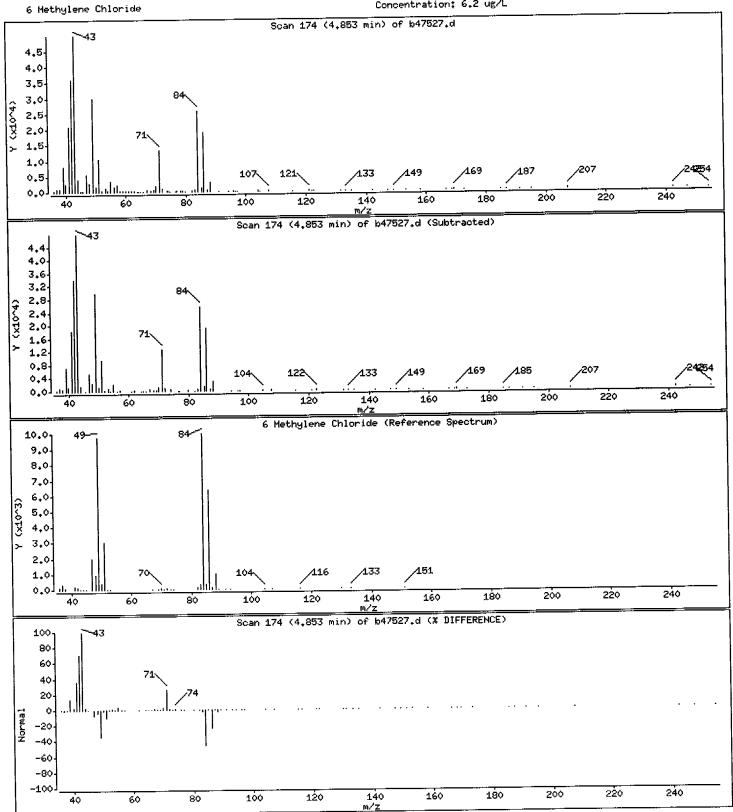
Column phase: Rtx-VMS

Instrument: VOAMS2.i

Operator: VOAMS 3

Column diameter: 0.18

Concentration: 6.2 ug/L



Date : 27-JAN-2007 00:26 Client ID: ASE-107A-6D1

Instrument: VOAMS2.i

Sample Info: 798091

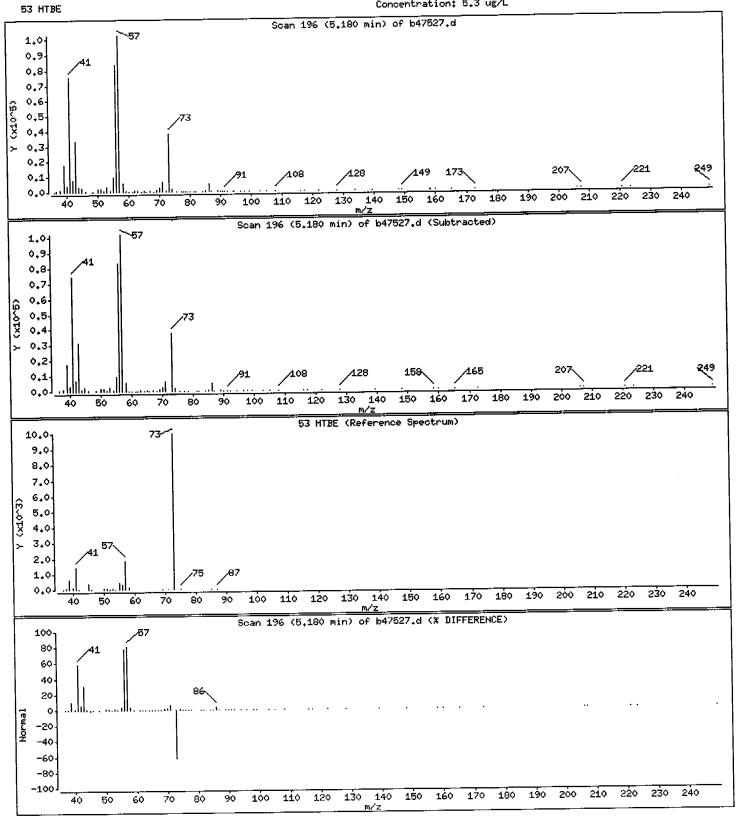
Purge Volume: 5.0

Column phase: Rtx-VMS

Operator: VOAMS 3

Column diameter: 0.18

Concentration: 5.3 ug/L



Date : 27-JAN-2007 00:26

Client ID: ASE-107A-6D1

Instrument: VOAMS2.i

Sample Info: 798091

Purge Volume: 5.0

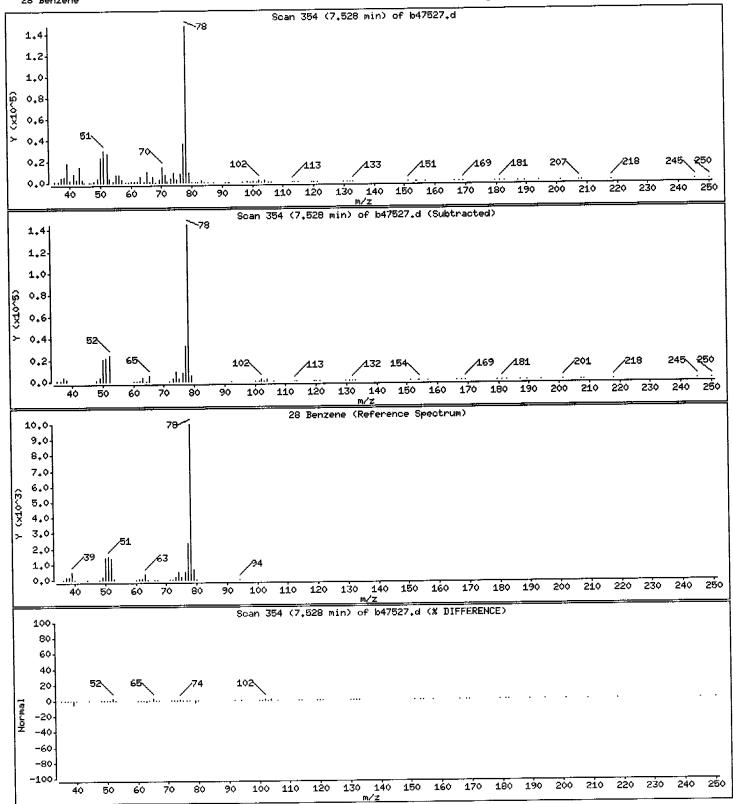
Column phase: Rtx-VMS

Operator: VOAMS 3

Column diameter: 0.18

28 Benzene

Concentration: 15 ug/L



Date : 27-JAN-2007 00:26

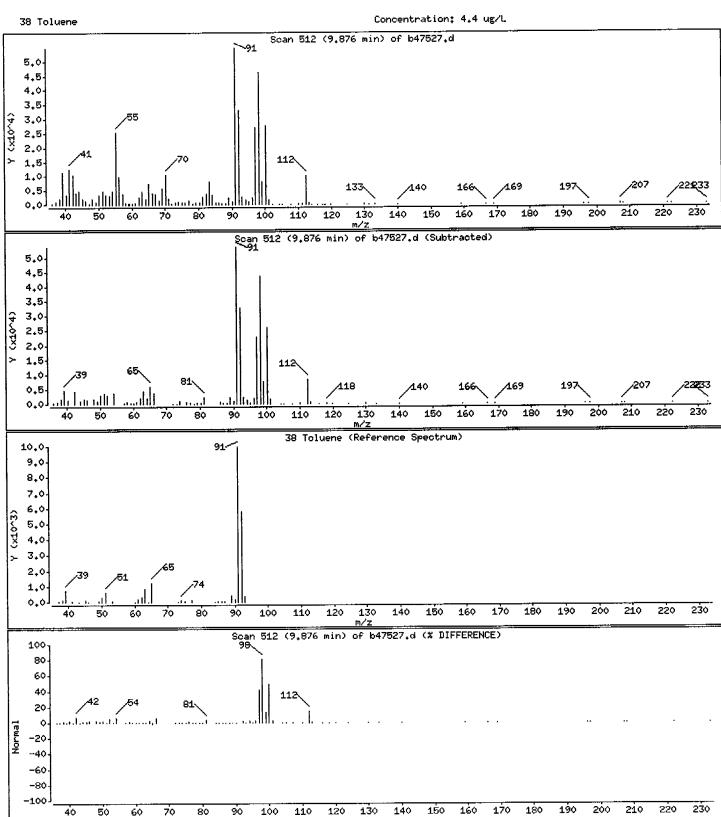
Instrument: VOAMS2.i Client ID: ASE-107A-6D1

Sample Info: 798091 Purge Volume: 5.0

Column diameter: 0.18

Column phase: Rtx~VMS

Operator: VOAMS 3



Date : 27-JAN-2007 00:26

Client ID: ASE-107A-6D1 Instrument: VOAMS2.i

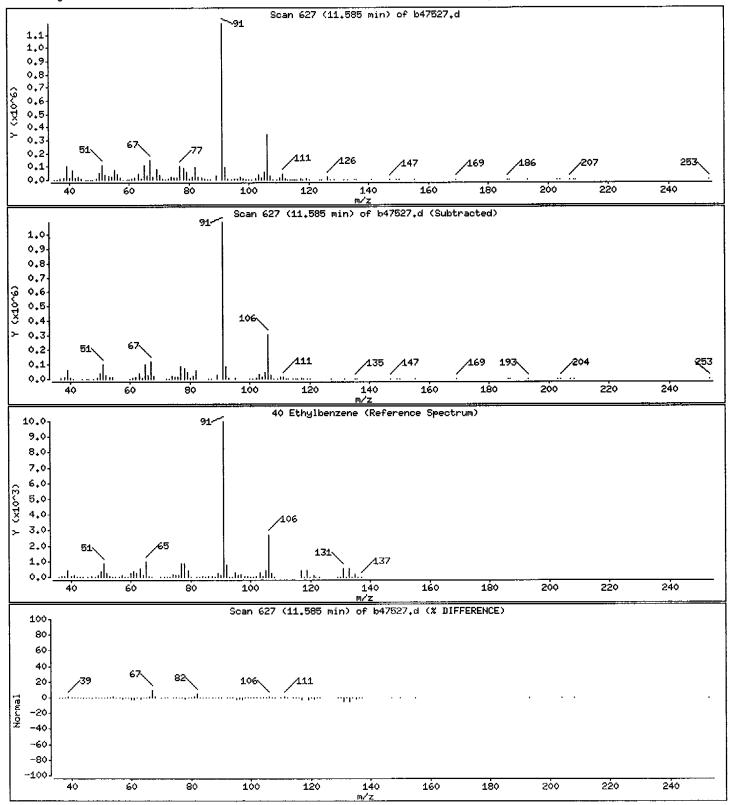
Sample Info: 798091

Purge Volume: 5.0 Operator: VOAMS 3

Column phase: Rtx-VMS Column diameter: 0.18



Concentration: 69 ug/L



Date : 27-JAN-2007 00:26

Client ID: ASE-107A-6D1

Instrument: VOAMS2.i

Sample Info: 798091

Column phase: Rtx-VMS

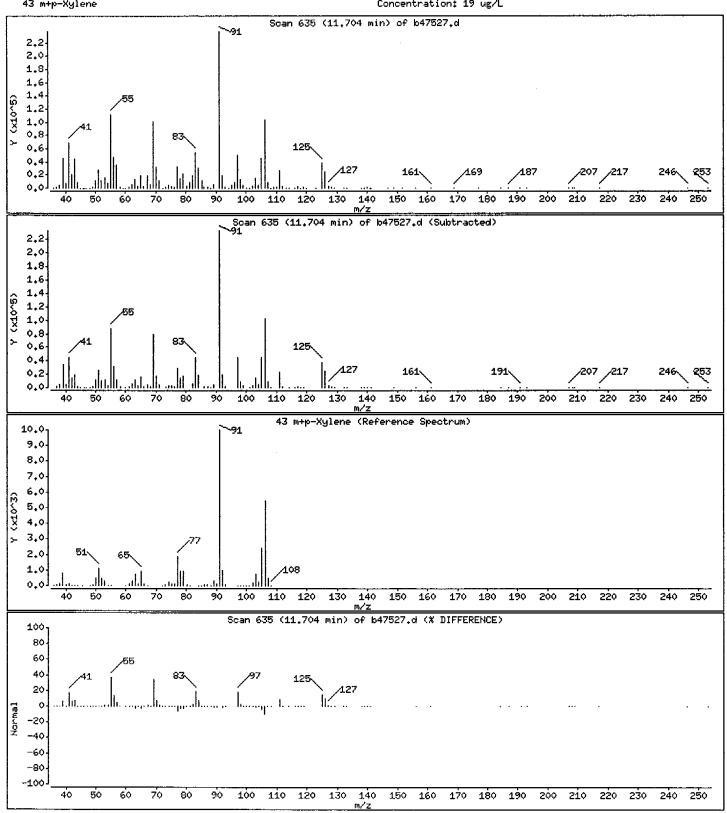
Purge Volume: 5.0

Operator: VOAMS 3

Column diameter: 0.18

43 m+p-Xylene

Concentration: 19 ug/L



Date : 27-JAN-2007 00:26 Client ID: ASE-107A-6D1

Instrument: VOAMS2.i

Sample Info: 798091 Purge Volume: 5.0

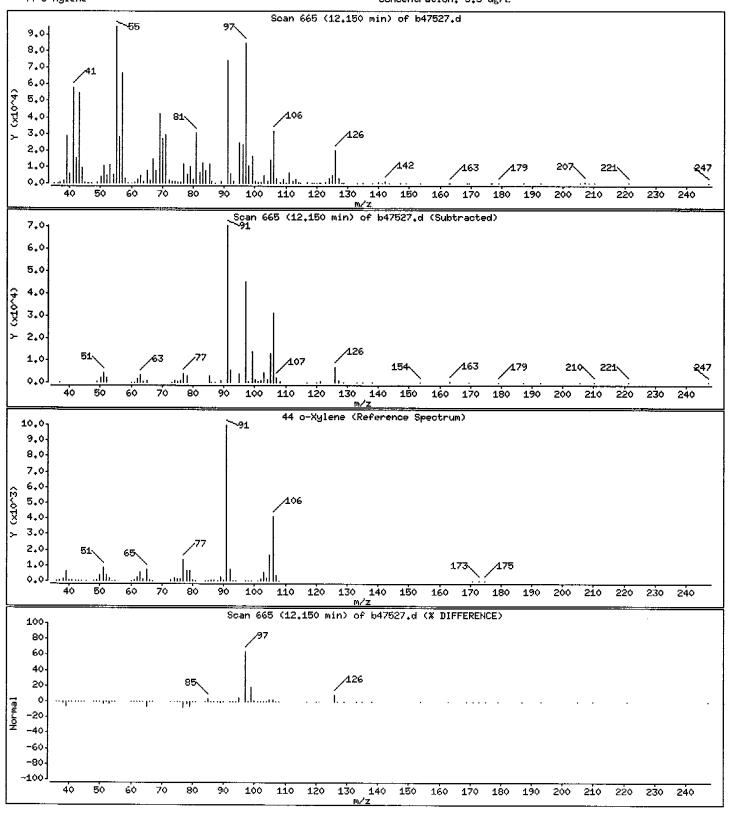
Operator: VOAMS 3

Column phase: Rtx-VMS

Column diameter: 0.18

44 o~Xylene

Concentration: 5.3 ug/L



Tuning Results Summary

## VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK BROMOFLUOROBENZENE (BFB)

Lab File ID: B47494 BFB Injection Date: 01/25/07

Instrument ID: VOAMS2 BFB Injection Time: 1639

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
		========
50	15.0 - 40.0% of mass 95	18.0
75	30.0 - 60.0% of mass 95	44.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 ( 0.0)1
174	50.0 - 100.0% of mass 95	70.0
175	5.0 - 9.0% of mass 174	5.3 ( 7.5)1
176	95.0 - 101.0% of mass 174	69.7 ( 99.6)1
177	5.0 - 9.0% of mass 176	4.2 ( 6.0)2
	1-Value is % mass 174 2-Value is % mass	176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CITEMP ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CDIBNI ID	JAMPHE NO.		========	========
01 02 03 04 05 06 07 08 09 10 11 12 13 14	CLIENT ID ====================================	BSTD010 BSTD020 BSTD050 BSTD200 BSTD100	B47497 B47498 B47499 B47501 B47507	ANALIZED  ===================================	1759 1830 1907 2006 2135 0010
16 17 18 19 20 21 22					

page 1 of 1

Date : 25-JAN-2007 16:39

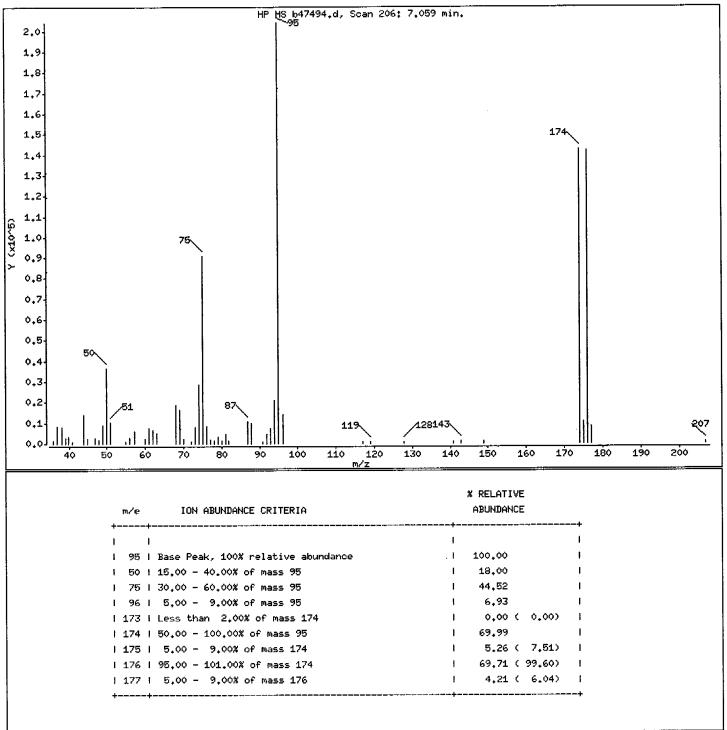
Client ID:

Instrument: VOAMS2.i

Sample Info: BBFB025

Operator: VOAMS 1
Column diameter: 0.53

Column phase: DB-624 1 Bromofluorobenzene



Date : 25-JAN-2007 16:39

Client ID:

Instrument: VOAMS2.i

Sample Info: BBFB025

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53

Data File: b47494.d

Spectrum: HP MS b47494.d, Scan 206: 7.059 min.

Location of Maximum: 95.00 Number of points: 53

	m/z	Y		m/z	Y		m/z	Y		m/z	Υ
+-	 35.85	1386		56,00	2808		76,95			116.90	918 I
ı	36.95	8421	ı	57,10	5866	ı	78,05	1286	ı	119.00	1154 l
1	38.05	7952	1	60.00	2479	i	78,95	3239	ì	127,85	1042 I
ı	39,05	2733	ı	61.00	7714	ı	79.95	1614	ı	140,85	926 I
ţ	39,95	3511	ŧ	62,00	6455	ţ	80.95	4573	ł	142,85	1233 l
+-			+-			+-					+
1	40,95	837	ī	63,00	5149	ı	81,75	1223	l	148.90	1206 I
1	44.00	14234	i	68,00	18688	ı	86,95	10910	ŧ	173.95	142848 I
1	45.00	2227	ı	69.05	16616	ı	87.95	9807	1	174,95	10731 I
ı	47.00	2810	ı	70.05	2392	1	90.95	1083	ŀ	175,95	142272
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1	55.00	845	ı	76.05	8523	ī	96.10	14140	1		1
+-			-+-			+-			-+		+

Date : 25-JAN-2007 16:39

Client ID:

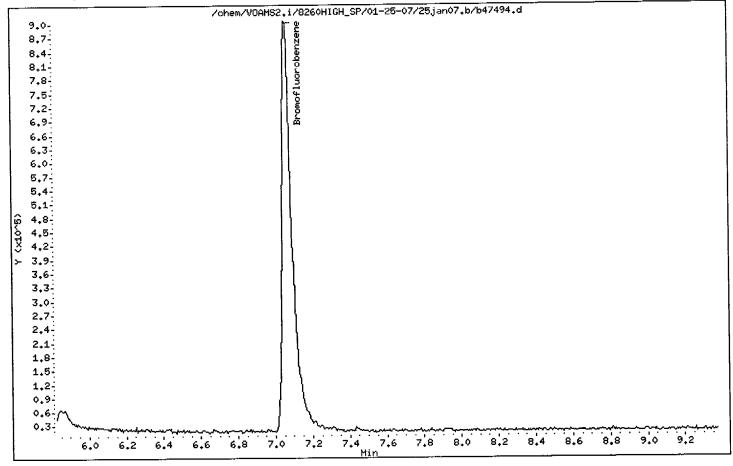
Instrument: VOAMS2.i

Sample Info: BBFB025

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53



# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK BROMOFLUOROBENZENE (BFB)

Lab File ID: B47511 BFB Injection Date: 01/26/07

Instrument ID: VOAMS2 BFB Injection Time: 1618

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
=====	*****************	=======================================
50	15.0 - 40.0% of mass 95	16.6
75	30.0 - 60.0% of mass 95	44.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 ( 0.0)1
174	50.0 - 100.0% of mass 95	75.8
175	5.0 - 9.0% of mass 174	5.7 ( 7.6)1
176	95.0 - 101.0% of mass 174	74.7 ( 98.6)1
177	5.0 - 9.0% of mass 176	5.4 ( 7.3)2
'——	1-Value is % mass 174 2-Value is % mass	176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	=========	==========	==========	========	
01	BSTD026	BSTD026	B47513	01/26/07	1717
02	BV026A	BV026A	B47516 B47527	01/26/07 01/27/07	1848 0026
03 04	ASE-107A-6D1	798091	54/52/	01/2//07	0020
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page 1 of 1

Date : 26-JAN-2007 16:18

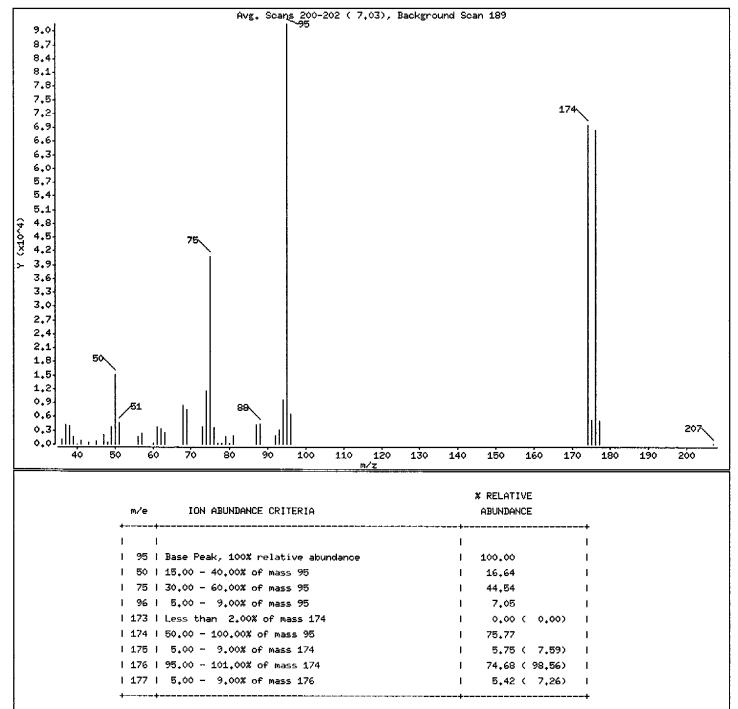
Client ID:

Instrument: VOAMS2.i

Sample Info: BBFB026

Operator: VOAMS 1
Column diameter: 0.53

Column phase: DB-624 1 Bromofluorobenzene



Date : 26-JAN-2007 16:18

Client ID:

Instrument: VOAMS2.i

Sample Info: BBFB026

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53

Data File: b47511.d

Spectrum: Avg. Scans 200-202 ( 7,03), Background Scan 189

Location of Maximum: 95.00 Number of points: 42

	m/z	Y	m/z	Y		m/z	Y		m/z	Υ	4
+ 	 36.00	1073 1	50.00	<b>15234</b>		74,00	11591		93,00	3210	
1	37.00	4244	51.00	4562	ı	75,00	40768	ı	94.00	9668	I
i	38.00	3915 I	56.00	1734	ì	76,00	3496	ı	95.00	91528	1
i	39,00	1665 I	57,00	2245	ı	77,00	313	ı	96.00	6453	I
ì	40.00	69 I	60.00	313	1	78.00	290	ŧ	174.00	69352	1
+-		+			+-			+			-+
ı	41.00	834 I	61,00	3815	1	79.00	1630	j	175.00	5262	l
1	43.00	319 I	62,00	3446	ı	80.00	306	ı	176.00	68352	ı
ı	45.00	606 I	63.00	2609	1	81.00	1998	١	177,00	4965	1
i	47.00	2006 1	68.00	8497	ı	87,00	4236	Ī	207.00	42	ı
ı	48.00	388 I	69,00	7581	1	88.00	4314	۱			1
+-	49,00	3739 I	•	3883		92.00	1865				-+   

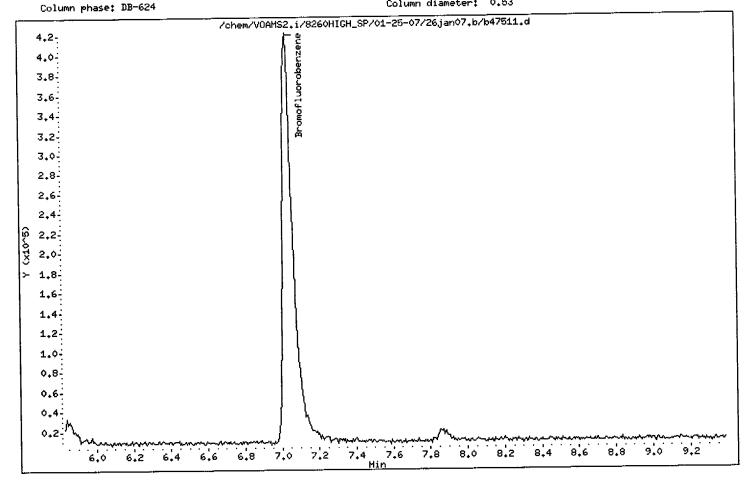
Date : 26-JAN-2007 16:18

Client ID:

Instrument: VOAMS2.i

Sample Info: BBFB026

Operator: VOAMS 1
Column diameter: 0.53



Method Blank Results Summary

#### VOLATILE METHOD BLANK SUMMARY

BV026A
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Matrix: WATER

Date Analyzed: 01/26/07

Level: LOW

Time Analyzed: 1848

Lab File ID: B47516

Heated Purge (Y/N) N

Instrument ID: VOAMS2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	TIME ANALYZED
01 02	ASE-107A-6D1	798091	B47527	0026
03 04 05				
06 07				
08 09 10				
11 12 13				
14 15				
16 17 18				
19 20 21				
22 23 24				
25 26				
27 28 29				
30				

COMMENTS:			

page 1 of 1

Client ID: BV026A

Site:

Lab Sample No: BV026A

Lab Job No: B620

Date Sampled: Matrix: WATER Level: LOW

Date Received:

Date Analyzed: 01/26/07

GC Column: Rtx-VMS

Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

Instrument ID: VOAMS2.i Lab File ID: b47516.d

#### VOLATILE ORGANICS - GC/MS METHOD 8260B

<u>Parameter</u>	Analytical Result <u>Units: uq/l</u>	Quantitation Limit <u>Units: ug/l</u>
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide Trichlorofluoromethane 1,1-Dichloroethene 1,1-Dichloroethene trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane 8enzene trans-1,3-Dichloropropene 2-Chloroethyl Vinyl Ether Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene	ND ND ND ND ND ND ND ND ND ND ND ND ND N	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0
Chlorobenzene Ethylbenzene	ND	4.0

Lab Sample No: BV026A Client ID: BV026A

Lab Job No: B620 Site:

Matrix: WATER Level: LOW

Date Sampled:
Date Received:
Date Analyzed: 01/26/07
GC Column: Rtx-VMS Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS2.i Lab File ID: b47516.d

#### VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

<u>Parameter</u>	Analytical Result <u>Units: uq/l</u>	Quantitation Limit <u>Units: ug/l</u>
Styrene Xylene (Total) Ethyl Ether Acrolein Freon TF Isopropanol Acetonitrile TBA Acrylonitrile MTBE Hexane DIPE Ethyl Acetate Vinyl Acetate Tetrahydrofuran Cyclohexane Isobutanol Isopropyl Acetate n-Heptane n-Butanol Propyl Acetate 1,2-Dibromoethane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene Naphthalene Methylnaphthalene (total) Dimethylnaphthalene (total)	ND ND ND ND ND ND ND ND ND ND ND ND ND N	5.0 5.0 5.0 5.0 100 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5
Dichlorodifluoromethane 1,1-Dichloropropene 1,2,4-Trichlorobenzene Hexachlorobutadiene 1,4-Dioxane	ND ND ND ND ND	5.0 5.0 5.0 5.0 1000

Client ID: BV026A

Site:

Lab Sample No: **BV026A** Lab Job No: B620

Matrix: WATER Level: LOW

Date Sampled:
Date Received:
Date Analyzed: 01/26/07
GC Column: Rtx-VMS Purge Volume: 5.0 ml Dilution Factor: 1.0 Instrument ID: VOAMS2.i

Lab File ID: b47516.d

## VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Quantitation Limit <u>Units: ug/l</u>
Methyl Acrylate 1,1,1,2-Tetrachloroethane 1,2,3-Trichlorobenzene 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,2-Dibromo-3-chloropropane 1,3,5-Trimethylbenzene 1,3-Dichloropropane 2,2-Dichloropropane 2,2-Dichloropropane 2-Chlorotoluene Bromobenzene Bromochloromethane Dibromomethane Isopropylbenzene n-Butylbenzene n-Propylbenzene p-Isopropyltoluene sec-Butylbenzene tert-Butylbenzene tert-Butylbenzene Allyl chloride Benzyl chloride Epichlorohydrin Isoprene Methyl methacrylate n-Pentane Allyl alcohol 2-Octanone Ethyl Acrylate	ND ND ND ND ND ND ND ND ND ND ND ND ND N	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0
Butyl Acrylate Butyl Methacrylate Ethyl methacrylate Ethanol	ND ND ND ND	5.0 5.0 5.0 500

Client ID: BV026A

Site:

Lab Sample No: BV026A

Lab Job No: B620

Date Sampled: Matrix: WATER
Date Received: Level: LOW

Date Sampled:
Date Received:
Date Analyzed: 01/26/07
GC Column: Rtx-VMS
Instrument ID: VOAMS2.i
Lab File ID: b47516.d

Purge Volume: 5.0 ml Dilution Factor: 1.0

#### VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

<u>Parameter</u>	Analytical Result <u>Units: ug/l</u>	Quantitation Limit <u>Units: ug/l</u>
Methyl Acetate	ND	5.0
Methyl cyclohexane	ND	5.0
Cyclohexanone	ND	100
p-Ethyltoluene	ND	5.0
1,4-Diethylbenzene	ND	5.0
1,2,4,5-Tetramethylbenzene	ND	5.0
Propylene Oxide	ND	50
Camphene (total)	ND	20
Camphor	ND	20
Amyl Acetate	ND	10
2-Methylnaphthalene	ND	5.0
1-Chlorohexane	ND	5.0
Chlorotrifluoromethane	ND	5.0
Chlorodifluoromethane	ND	5.0
tert-Amylmethyl Ether	ND	5.0
Iodomethane	ND	5.0
trans-1,4-Dichloro-2-butene	ND	5.0
Acetaldehyde	ND	10
1,3,5-Trichlorobenzene	ND	5.0
1,2-Dichlorotrifluoroethane	ПИ	5.0
1-Bromo-2-chloroethane	ND	5.0
4-Chlorobenzotrifluoride	ND	5.0
2-Chloropropene	ND	5.0
tert-Butyl ethyl ether	ND	5.0
1,3-Butadiene	ND	5.0

Client ID: BV026A Site:

Lab Sample No: BV026A

Lab Job No: B620

Date Sampled: Date Received: Matrix: WATER Level: LOW

Date Analyzed: 01/26/07 GC Column: Rtx-VMS

Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS2.i Lab File ID: b47516.d

#### VOLATILE ORGANICS - GC/MS TENTATIVELY IDENTIFIED COMPOUNDS METHOD 8260B

COMPOUND NAME	RT	EST. CONC. ug/l	Q ====
1. NO VOLATILE ORGANIC COMPOUNDS FOUND			
2			
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16	_		
17			
18	-		
19.			.
20			.
21.			.
23			.
24		.	-
25			-
26			-
2/.		-	-
28		-	-
29 -		-	-
30.			-
	1	.	- 1 <del></del>

0.0 TOTAL ESTIMATED CONCENTRATION

Data File: /chem/VOAMS2.i/8260HIGH\_SP/01-25-07/26jan07.b/b47516.d

Report Date: 29-Jan-2007 22:47

## STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS2.i/8260HIGH\_SP/01-25-07/26jan07.b/b47516.d Lab Smp Id: BV026a

Inj Date : 26-JAN-2007 18:48

Inst ID: VOAMS2.i Operator : VOAMS 3

Smp Info : BV026a

Misc Info :

Method : /chem/VOAMS2.i/8260HIGH\_SP/01-25-07/26jan07.b/8260H\_06.m Meth Date : 26-Jan-2007 19:29 eddie Quant Type: ISTD Cal Date : 26-JAN-2007 00:10 Cal File: b47507.d

Als bottle: 1

Dil Factor: 1.00000

Compound Sublist: all.sub Integrator: HP RTE

Target Version: 3.50

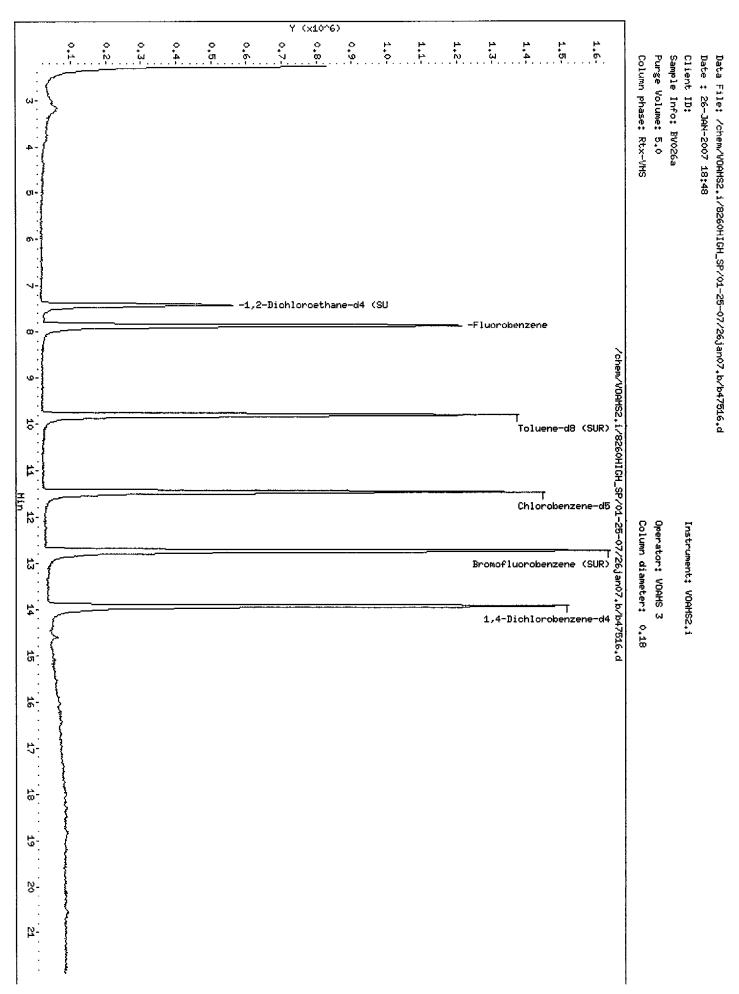
Concentration Formula: Amt \* DF \* 5/Vo \* CpndVariable

Name	Value	Description
DF Vo	1.00000	Dilution Factor SampleVolume

Cpnd Variable

Local Compound Variable

					CONCENTRA	TIONS
					ON-COLUMN	FINAL
	QUANT SIG MASS	RT	EXP RT REL RT	RESPONSE	( ug/L)	( ug/L)
Compounds	MASS EEFF	==	=======================================	=======	=#====	
	65	7.406	7.410 (0.941)	852445	48.2085	48
<pre>\$ 16 1,2-Dichloroethane-d4 (SUR)</pre>	96	7.866	7,855 (1.000)	2632446	50.0000	
* 19 Fluorobenzene		9.784	9.787 (0.855)	2156580	47.0558	47
\$ 37 Toluene-d8 (SUR)	98	11.448		1960225	50.0000	
* 32 Chlorobenzene-d5	117		(+ 0.5)	1126628	49,3726	49
\$ 41 Bromofluorobenzene (SUR)	174	12.711		1043983	50.0000	
* 91 1,4-Dichlorobenzene-d4	152	13.915	13,904 (1.000)	1010101	-	



Calibration Summary

Instrument ID: VOAMS2

Calibration Date(s): 01/25/07 01/26/07

Heated Purge: (Y/N) N

Calibration Time(s): 1759 0010

AB FILE ID: RRF5: B47! RRF50: B47		RF10: B474 RF100: B47	<i>-</i>	F20: B4749	
COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF100 =======
======================================	========		0.162	0.165	0.134
Chloromethane	0.163				0.193
			0.216		0.204
Bromomethane Vinyl Chloride	0.231		_		0.097
Chloroethane	1 0.1301				0.299
Chloroethane Methylene Chloride	0.367				0.020
Acetone	0.027			l l	
Acetone Carbon Disulfide Trichlorofluoromethane	0.666		_		
Trichlorofluoromethane	0.687				
1,1-Dichloroethene	0.394			1	
1,1-Dichloroethane	0.594		_	1	
trans-1,2-Dichloroethene	0.394		_		
cis-1,2-Dichloroethene	1 0.3/1				
				I	
Chloroform 1,2-Dichloroethane	0.482		0.397		
		0.022		1	
2-Butanone 1,1,1-Trichloroethane	0.586	0.542			!
Carbon Tetrachloride	0.640	0.512			
Bromodichloromethane	0.891	0.575			1
1,2-Dichloropropane	0.534	0.320			
cis-1,3-Dichloropropene	0.484	0.461			i .
		0.394			
Trichloroethene Dibromochloromethane	-\ 0.741	0.648			
1,1,2-Trichloroethane	0.450	0.333	0.424		1 .
Benzene	_  1.190	0.725			
trans-1,3-Dichloropropene_	0.532	0.476	0.615		
2-Chloroethyl Vinyl Ether			0.197		1
	_   0.498	0.458			1
Bromoform 4-Methyl-2-Pentanone	0.184	0.247			<b>  </b>
4-Methy1-2-Fericanone	- 0.122		0.209		
2-Hexanone Tetrachloroethene	1.068		0.70		
1,1,2,2-Tetrachloroethane_	2.048		1.21		' 1
	_  1.30 <sup>r</sup>	7 1.072			1
Toluene	1.05		1.03		
Chlorobenzene	0.45		0.45		
Ethylbenzene	0.80	- L	0.88	0.898	
Styrene	0.56	- 1	0.57		
Xylene (Total)	一 0.17	- 1	5 0.19		
Ethyl Ether	- 0.00	0.00	5 0.00		
Acrolein	ー 0.67	-1 .		5 0.70	0.6
Freon TF			1		_

Instrument ID: VOAMS2 Calibration Date(s): 01/25/07 01/26/07

Heated Purge: (Y/N) N Calibration Time(s): 1759 0010

LAB FILE ID: RRF5: B475 RRF50: B47		RF10: B474 RF100: B47	•	F20: B4749	8
COMPOUND	RRF5	RRF10	RRF20 =======	RRF50	RRF100
Isopropanol Acetonitrile	0.014	0.014	0.016	0.014	0.013
ו אמתיו	0.017	0.023	0.020	0.019	0.018
Acrylonitrile	0.054	0.057		0.057	0.057
MTBE !	0.639	0.644	0.713	0.680	0.635
Hexane					
DIPE	0.868	0.905		0.942	0.863
DIPE Ethyl Acetate	0.035	0.037		0.039	0.035
Vinyl Acetate	0.585	0.610	0.673	0.635	0.694
Vinyl Acetate Tetrahydrofuran				l— <u> </u>	0.370
Cyclonexane	0.400	0.380	0.424	0.398	0.370
Isobutanol					0.500
Isobutanol Isopropyl Acetate	0.444	0.537	0.575	0.554	0.500
n-Heptane					
In-Butanol I					0.386
Propyl Acetate	0.390	0.459		0.444	
Butyl Acetate	0.554	0.638		0.718	
Butyl Acetate  1,2-Dibromoethane	0.749	0.622		0.781	
11.3-DICHIOLOBEHZEHE	1.580	1.284			
1,4-Dichlorobenzene	2.068	1.689			
1,2-Dichlorobenzene	1.591	1.360			
Naphthalene	2.063	1.668		1.692	
Methylnaphthalene (total)	0.962	0.975			
Dimethylnaphthalene (total)	0.574	0.504			
Dichlorodifluoromethane	0.383	0.322			
1,1-Dichloropropene	0.471	0.432			
1,2,4-Trichlorobenzene	1.252	1.051			
Hexachlorobutadiene	0.865	0.702			
1,4-Dioxane	0.002	0.003	0.003	0.003	0.003
Methyl Acrylate					0.620
1,1,1,2-Tetrachloroethane	0.554	0.472			
1,2,3-Trichlorobenzene	1.124	0.931			
1,2,3-Trichloropropane	0.331	0.306			
1,2,4-Trimethylbenzene	2.301	1.932			
1,2-Dibromo-3-chloropropane	0.255	0.231			
1,3,5-Trimethylbenzene	2.338	1.958			
1,3-Dichloropropane	0.700	0.578			
2,2-Dichloropropane	0.466	0.442			
2-Chlorotoluene	1.673	1.423	1.555	1.509	1.558
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Instrument ID: VOAMS2 Calibration Date(s): 01/25/07 01/26/07

Heated Purge: (Y/N) N Calibration Time(s): 1759 0010

LAB FILE ID: RRF5: B475 RRF50: B47	· • -	RF10: B474 RRF100: B47		F20: B4749	8
COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF100
4-Chlorotoluene	2.777	2.364	2.560	2.445	2.562
				0.953	
BromobenzeneBromochloromethane	0.244				0.250
Dibromomethane	0.387			0.364	
Dibromomethane	1.588			1.600	1.722
n-Butylbenzene	2.669	l .			2.510
n-Propylbenzene	3.381	i		3.104	
n-Propylbenzene p-Isopropyltoluene	2.668				
sec-Butylbenzene	3.450				3.144
sec-Butylbenzene  tert-Butylbenzene	2.434		1		2.338
Allyl chloride	2.131				
Benzyl chloride	1.125	1.410	1.421	1.319	1.393
Epichlorohydrin	0.026				0.029
	0.244		1		0.255
Isoprene	0.087				0.084
	0.046				0.042
n-Pentane	0.040	0.010			
n-Pentane Allyl alcohol					
2-Octanone		<del></del>			
Ethyl Acrylate					
Butyl Acrylate		· · · · · · · · · · · · · · · · · · ·			
Butyl Methacrylate	· · · · · · · · · · · · · · · · · · ·				
Ethyl methacrylate					
Ethanol	0.287	0.264	0.303	0.282	0.226
Methyl Acetate	0.416				
Methyl cyclohexane	0.410	0.400	0.115	3.22	
Cyclohexanone	.				
p-Ethyltoluene			-		
1,4-Diethylbenzene			\ <del></del>	· <del></del>	
1,2,4,5-Tetramethylbenzene_	.	·		.	
Propylene Oxide Camphene (total)		.	-		
		·	-		
Camphor	-	-			
Amyl Acetate	-		-	·	
2-Methylnaphthalene	-	-	-	-	
1-Chlorohexane	-			-	
Chlorotrifluoromethane	_	-	-		
Chlorodifluoromethane	-	-			
tert-Amylmethyl Ether		-	-	-	
	_	_	_ 1	_	.

Instrument ID: VOAMS2 Calibration Date(s): 01/25/07 01/26/07

Heated Purge: (Y/N) N Calibration Time(s): 1759 0010

LAB FILE ID: RRF5: B475 RRF50: B47	V -	RF10: B474 RF100: B47		F20: B4749	8
COMPOUND ====================================	RRF5	RRF10	RRF20	RRF50 ====================================	RRF100
1,2-Dichloroethane-d4 (SUR)_ Toluene-d8 (SUR)_ Bromofluorobenzene (SUR)	0.330 1.110 1.180	1.063	1.142	1.213	1.272

Calibration Date(s): 01/25/07 01/26/07 Instrument ID: VOAMS2

0010 Calibration Time(s): 1759 Heated Purge: (Y/N) N

RRF200: B47501

RRF200: B47501		
COMPOUND	RRF200	
=======================================	=======	
Chloromethane	0.154	
Bromomethane	0.188	
Vinyl Chloride	0.209	
Chloroethane	0.095	
Methylene Chloride	0.301	
Acetone	0.016	
Carbon Disulfide	0.727	
Trichlorofluoromethane	0.637	
1,1-Dichloroethene	0.273	
1,1-Dichloroethane	0.527	
trans-1,2-Dichloroethene	0.342	
cis-1,2-Dichloroethene	0.335	
Chloroform	0.672	
1,2-Dichloroethane	0.387	
2-Butanone	0.024	
1,1,1-Trichloroethane	0.573	
Carbon Tetrachloride	0.538	
Bromodichloromethane	0.693	
1,2-Dichloropropane	0.332	
cis-1,3-Dichloropropene	0.531	
Trichloroethene	0.412	
Dibromochloromethane	0.917	
1,1,2-Trichloroethane	0.406	
Benzene	0.758	
trans-1,3-Dichloropropene	0.642	
2-Chloroethyl Vinyl Ether	0.184	
Bromoform	0.654	
4-Methyl-2-Pentanone	0.228	
2-Hexanone	0.177	
Tetrachloroethene	0.584	
1,1,2,2-Tetrachloroethane	1.216	
Toluene	1.248	
Chlorobenzene	0.962	
Ethylbenzene	0.376	
Styrene	0.838	
Xylene (Total)	0.480	
Ethyl Ether	0.168	
Acrolein	0.006	
Freon TF	0.622	
	_	

<sup>\*</sup> Compound with required maximum % RSD value.

<sup>\*\*</sup> Compound with required minimum RRF value.

Calibration Date(s): 01/25/07 01/26/07 Instrument ID: VOAMS2

Calibration Time(s): 1759 0010 Heated Purge: (Y/N) N

RF200: B47501		
LREZOO. D4/Joil		
COMPOUND	RRF200	
=======================================	=======	
Isopropanol		
Acetonitrile	0.014	
TBA	0.018	
Acrylonitrile	0.058	
MTBE	0.664	
Hexane		
DIPE	0.909	
Ethyl Acetate	0.035	
Vinyl Acetate	0.734	
Tetrahydrofuran		
Cyclohexane	0.343	
Isobutanol		
Isopropyl Acetate	0.500	
n-Heptane		
n-Butanol		
Propyl Acetate	0.367	
Butyl Acetate	0.608	
1,2-Dibromoethane	0.796	
1,3-Dichlorobenzene	1.241	
1,4-Dichlorobenzene	1.556	
1,2-Dichlorobenzene	1.265	
Naphthalene	1.487	
Methylnaphthalene (total)	1.166	
Dimethylnaphthalene (total)_	0.552	
Dichlorodifluoromethane	0.350	
1,1-Dichloropropene	0.435	
1,2,4-Trichlorobenzene	0.911	
Hexachlorobutadiene	0.600	
1,4-Dioxane	0.003	
Methyl Acrylate		
1,1,1,2-Tetrachloroethane	0.558	
1,2,3-Trichlorobenzene	0.795	
1,2,3-Trichloropropane	0.314	
1,2,4-Trimethylbenzene	1.774	
1,2-Dibromo-3-chloropropane	0.241	
1,3,5-Trimethylbenzene	_  1.807	
1,3-Dichloropropane	0.670	
2,2-Dichloropropane	0.453	
2-Chlorotoluene	1.450	

<sup>\*</sup> Compound with required maximum % RSD value. \*\* Compound with required minimum RRF value.

Calibration Date(s): 01/25/07 01/26/07 Instrument ID: VOAMS2

0010 Calibration Time(s): 1759 Heated Purge: (Y/N) N

RRF200: B47501

RRF200: B47501		
COMPOUND	RRF200	
	=======	
4-Chlorotoluene	2.263	
	0.922	
Bromobenzene Bromochloromethane	0.257	
Dibromomethane	[ 0.378	
Isopropylbenzene	1.358	
n-Butylbenzene	2.010	
n-Propylbenzene	2.804	
p-Isopropyltoluene	2.012	
sec-Butylbenzene	2.669	
tert-Butylbenzene	1.918	
Allyl chloride		
Benzyl chloride	1.379	
Epichlorohydrin	0.029	
Isoprene	0.248	
Methyl methacrylate	0.063	
	0.036	
n-Pentane Allyl alcohol	-	
2-Octanol		
2-Octanone		
Ethyl Acrylate		
Butyl Acrylate		
Butyl Methacrylate		
Ethyl methacrylate		
Ethanol		
Methyl Acetate	0.229	
Methyl cyclohexane	_ 0.318	
Cyclohexanone	_	
p-Ethyltoluene	_	
1,4-Diethylbenzene		
1,2,4,5-Tetramethylbenzene		
Propylene Oxide		
Camphene (total)		
Camphor		
Amyl Acetate		
2-Methylnaphthalene		
1-Chlorohexane		
Chlorotrifluoromethane		
Chlorodifluoromethane		
tert-Amylmethyl Ether		
1		

<sup>\*</sup> Compound with required maximum % RSD value.
\*\* Compound with required minimum RRF value.

Instrument ID: VOAMS2 Calibration Date(s): 01/25/07 01/26/07

Heated Purge: (Y/N) N Calibration Time(s): 1759 0010

RRF200: B47501

COMPOUND	RRF200	
Iodomethane trans-1,4-Dichloro-2-butene		
Acetaldehyde 1,3,5-Trichlorobenzene 1,2-Dichlorotrifluoroethane		
1-Bromo-2-chloroethane 4-Chlorobenzotrifluoride 2-Chloropropene		
tert-Butyl ethyl ether		
1,2-Dichloroethane-d4 (SUR)_ Toluene-d8 (SUR)_	0.348	
Bromofluorobenzene (SUR)	1.141	

<sup>\*</sup> Compound with required maximum % RSD value.
\*\* Compound with required minimum RRF value.

Instrument ID: VOAMS2 Calibration Date(s): 01/25/07 01/26/07

Heated Purge: (Y/N) N Calibration Time(s): 1759 0010

			COEFFICENTS		%RSD
COMPOUND	CURVE		A1	A2	OR R^2
Chloromethane	AVRG	========	0.15620181	=======	7.4*
Bromomethane	AVRG		0.19445822		6.9*
Vinyl Chloride	AVRG		0.21202658		5.1*
Chloroethane	LINR	-0.0929413		<u> </u>	1.000*
Methylene Chloride	AVRG	"""	0.30889481		9.8*
Acetone	2ORDR	0.0000000	36.5648511	358.100608	0.998*
Carbon Disulfide	AVRG		0.72002777	330.10000	5.0*
Trichlorofluoromethane	AVRG		0.64035120		5.3*
1,1-Dichloroethene	LINR	-0.0255642	3.65963989		1.000*
1,1-Dichloroethane	AVRG		0.54239208		5.3*
trans-1,2-Dichloroethene	AVRG		0.35276234		6.4*
cis-1,2-Dichloroethene	AVRG		0.34389529		4.4*
Chloroform	AVRG		0.67268427		4.7*
1,2-Dichloroethane	AVRG		0.39258287		11.8*
2-Butanone	AVRG		0.02435335		7.9*
1,1,1-Trichloroethane	AVRG		0.56926023		3.0*
Carbon Tetrachloride	AVRG		0.56099231		7.8*
Bromodichloromethane	LINR	0.03717640	1.43809836		0.999*
1,2-Dichloropropane	LINR		3.02625736		1.000*
cis-1,3-Dichloropropene	- AVRG		0.50161110		5.4*
Trichloroethene	LINR	-0.0068438	2.42792872		1.000*
Dibromochloromethane	AVRG		0.83398945		13.8*
1,1,2-Trichloroethane	AVRG		0.40798609		9.8*
Benzene	LINR	-0.0054184	1.32010322		1.000*
trans-1,3-Dichloropropene	AVRG		0.58885566		11.9*
2-Chloroethyl Vinyl Ether	AVRG		0.18091082		6.9*
Bromoform	LINR	0.02638400			0.999*
4-Methyl-2-Pentanone	AVRG		0.23021966		10.7*
2-Hexanone	LINR	-0.0403856	5.65855285		0.998*
Tetrachloroethene	20RDR	0.00000000	1.13271928	0.24178413	0.998*
1,1,2,2-Tetrachloroethane	LINR	0.00000000	0.82307953		1.000*
Toluene	AVRG		1.26737554		8.1*
Chlorobenzene	AVRG		0.99937907		8.1*
Ethylbenzene	_ AVRG		0.42513389		9.6*
Styrene	AVRG		0.85386916		10.7*
Xylene (Total)	AVRG		0.53864317		10.0*
Ethyl Ether	AVRG		0.17599098		6.0*
Acrolein	LINR	0.80937280	155.654		0.991*
Freon TF	AVRG		0.67342685		5.4*
	_				1

<sup>\*</sup> Compound with required maximum % RSD value.
\*\* Compound with required minimum RRF value.

Calibration Date(s): 01/25/07 01/26/07 Instrument ID: VOAMS2

Calibration Time(s): 1759 0010 Heated Purge: (Y/N) N

		%RSD			
COMPOUND	CURVE	<b>A</b> 0	A1	A2	OR R^2
=======================================	1		:= ====== =	=======	========
Isopropanol	AVRG _		_		-  <del></del>
Acetonitrile	AVRG		0.01439155		7.2
TBA	AVRG		0.01912755		11.8
Acrylonitrile	AVRG		0.05734486		3.6
MTBE	AVRG		0.66257320 _		4.6
Hexane	AVRG _		_     _		-   <del></del>
DIPE	AVRG		0.91167977		5.0
Ethyl Acetate	AVRG _		0.03717864		6.6
Vinyl Acetate	AVRG		0.65535239 _		8.5
Tetrahydrofuran	AVRG				
Cyclohexane	AVRG		0.38609267		7.2
Isobutanol	AVRG _		_   _		
Isopropyl Acetate	AVRG _		_ 0.51825801 _		9.1
n-Heptane	AVRG _		_		
n-Butanol	AVRG _				
Propyl Acetate	AVRG _		0.42053176		10.6
Butyl Acetate	AVRG _		0.64564042 _		9.7
1,2-Dibromoethane	AVRG		0.76281736 _		9.7
1,3-Dichlorobenzene	AVRG		1.37823373 _		9.1
1,4-Dichlorobenzene	AVRG _		_ 1.81968584 _		10.4
1,2-Dichlorobenzene	AVRG		_ 1.43427620 _		7.9
Naphthalene	AVRG		1.72155062		10.9
Methylnaphthalene (total)	AVRG "		0.99976733		[ 8.7
Dimethylnaphthalene (total)	AVRG		0.51087285		9.4
Dichlorodifluoromethane -	AVRG		0.35246728		5.8
1,1-Dichloropropene	AVRG		0.45282953		3.9
1,2,4-Trichlorobenzene	AVRG		1.08621893  <sup>_</sup>		10.2
Hexachlorobutadiene	AVRG -		0.73029948		11.8
1,4-Dioxane	AVRG	•	0.00267992		6.0
Methyl Acrylate	AVRG		_   -		-
1,1,1,2-Tetrachloroethane	AVRG		0.56389921		9.0
1,2,3-Trichlorobenzene	AVRG		0.95105225		11.2
1,2,3-Trichloropropane	AVRG -		0.32048139		3.0
1,2,4-Trimethylbenzene	AVRG		_ 2.04660162 -		8.8
1,2-Dibromo-3-chloropropane	AVRG -		0.24824556		4.3
1,3,5-Trimethylbenzene	AVRG		2.08149755		8.9
1,3-Dichloropropane	AVRG		0.67602834		7.4
2,2-Dichloropropane	AVRG -		- 0.46037801 -		4.8
2-Chlorotoluene	AVRG -		$- _{1.52811272}^{-1.52811272} $		5.9
				•	-

<sup>\*</sup> Compound with required maximum % RSD value.
\*\* Compound with required minimum RRF value.

Instrument ID: VOAMS2 Calibration Date(s): 01/25/07 01/26/07

Heated Purge: (Y/N) N Calibration Time(s): 1759 0010

			COEFFICENTS		%RSD
COMPOUND	CURVE	A0	A1	<b>A</b> 2	OR R^2
4 Chl	- 1	=======	========	========	
4-Chlorotoluene	AVRG		2.49493689		7.2
Bromobenzene	AVRG		0.98019298		6.1
Bromochloromethane	AVRG		0.24852862		$3.1^{\circ}$
Dibromomethane	AVRG		0.37472832		3.6
Isopropylbenzene	AVRG		1.53303008		10.4
n-Butylbenzene	AVRG		2.40274677		9.6
n-Propylbenzene	AVRG		3.09124802		6.7
p-Isopropyltoluene	AVRG		2.37844122		9.7
sec-Butylbenzene	AVRG	:	3.01584225		9.3
tert-Butylbenzene	AVRG		2.20289374		8.5
Allyl chloride	AVRG		l		
Benzyl chloride	AVRG		1.34138551		8.3
Epichlorohydrin	AVRG		0.03008018		8.1
Isoprene	AVRG		0.25615546		4.6
Methyl methacrylate	AVRG		0.08143089		11.9
n-Pentane	AVRG		0.04237705		8.8
Allyl alcohol	AVRG				
2-Octanol	AVRG				
2-Octanone	AVRG				
Ethyl Acrylate	AVRG				
Butyl Acrylate	AVRG				
Butyl Methacrylate	AVRG				
Ethyl methacrylate	AVRG				
Ethanol	AVRG				
Methyl Acetate	AVRG		0.26524458		11.9
Methyl cyclohexane	AVRG		0.40110410		10.9
Cyclohexanone	AVRG		0.10110110		
p-Ethyltoluene	AVRG				
1,4-Diethylbenzene	AVRG			·	
1,2,4,5-Tetramethylbenzene	AVRG				
Propylene Oxide	AVRG				
Camphene (total)	AVRG				
Camphor	- AVRG				
Amyl Acetate	AVRG				
2-Methylnaphthalene	AVRG				·
1-Chlorohexane	AVRG				
Chlorotrifluoromethane	AVRG				
Chlorodifluoromethane	- AVRG				
tert-Amylmethyl Ether	AVRG				
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<sup>\*</sup> Compound with required maximum % RSD value.
\*\* Compound with required minimum RRF value.

Instrument ID: VOAMS2 Calibration Date(s): 01/25/07 01/26/07

Heated Purge: (Y/N) N Calibration Time(s): 1759 0010

		(	COEFFICENTS		%RSD
COMPOUND	CURVE	A0	A1	A2	OR R^2
Iodomethane trans-1,4-Dichloro-2-butene Acetaldehyde 1,3,5-Trichlorobenzene 1,2-Dichlorotrifluoroethane 1-Bromo-2-chloroethane 4-Chlorobenzotrifluoride 2-Chloropropene tert-Butyl ethyl ether 1,3-Butadiene	AVRG AVRG AVRG AVRG AVRG AVRG AVRG AVRG				
1,2-Dichloroethane-d4 (SUR)_ Toluene-d8 (SUR)_ Bromofluorobenzene (SUR)	AVRG AVRG AVRG		0.33585646 1.16900591 1.09287571		2.5° 6.6° 5.3°

<sup>\*</sup> Compound with required maximum % RSD value.
\*\* Compound with required minimum RRF value.

Instrument ID: VOAMS2 Calibration Date: 01/26/07 Time: 1717

Init. Calib. Times: 1759

0010

		RRF50.000					
COMPOUND	RRF or	or	CCAL	MIN	%D or	MAX %D or	CURV
	TUUOMA	AMOUNT	RRF50.000	RRF	%DRIFT	%DRIFT	TYPE
	========	=======	=======		======	=======	====
Chloromethane	0.1560000	0.1458070	0.1458070	0.1	6.53	50.00	AVRG
Bromomethane		0.1911679			1.46	50.00	AVRG
Vinyl Chloride	0.2120000	0.2062792	0.2062792		2.70	20.00	AVRG
Chloroethane	50.027831	50.000000	0.1020234		-0.06	50.00	LINR
Methylene Chloride	0.3090000	0.3058349	0.3058349		1.02	50.00	AVRG
Acetone	42.871191	50.000000	0.0196629		14.26		2RDR
Carbon Disulfide	0.7200000	0.7568414	0.7568414		-5.12	50.00	AVRG
Trichlorofluoromethane	0.6400000	0.6413580	0.6413580		-0.21		AVRG
1,1-Dichloroethene	51.892225	50.000000	0.2905774		-3.78	20.00	LINR
1,1-Dichloroethane	0.5420000	0.5337573	0.5337573	0.1	1.52	50.00	AVRG
trans-1,2-Dichloroethene	0.3530000	0.3562701	0.3562701		-0.93		
cis-1,2-Dichloroethene	0.3440000	0.3460099	0.3460099	•	-0.58		
Chloroform	0.6730000	0.6674815	0.6674815		0.82	20.00	AVRG
1,2-Dichloroethane	0.3930000	0.3842181	0.3842181		2.23		
2-Butanone	0.0240000	0.0279635	0.0279635		-16.51	50.00	AVRG
1,1,1-Trichloroethane	0.5690000	0.6020649	0.6020649		-5.81	50.00	AVRG
Carbon Tetrachloride	0.5610000	0.5777579	0.5777579		-2.99	50.00	AVRG
Bromodichloromethane	49.827826	50.000000	0.6671172		0.34	50.00	LINR
1,2-Dichloropropane	51.072661	50.000000	0.3390615		-2.14		
cis-1,3-Dichloropropene	0.5020000	0.5173971	0.5173971		-3.07		
Trichloroethene	51.731972	50.000000	0.4289596		-3.46		
Dibromochloromethane	0.8340000	0.8916165	0.8916165		-6.91	50.00	AVRG
1,1,2-Trichloroethane	0.4080000	0.4072293	0.4072293		0.19		
Benzene	51.899547	50.000000	0.7903998		-3.80		
trans-1,3-Dichloropropene	0.5890000	0.6314957	0.6314957		-7.21		AVRG
2-Chloroethyl Vinyl Ether	0.1810000	0.2056155	0.2056155		-13.60		
Bromoform	1	,	0.6577146				
4-Methyl-2-Pentanone			0.2458772		-6.90		
2-Hexanone			0.1945249		-6.03		
Tetrachloroethene			0.7155095		6.57		
1,1,2,2-Tetrachloroethane	!	!	1.2273617	!			
Toluene			1.3239447		-4.49		
Chlorobenzene			1.0430878		,		
Ethylbenzene		<u>J</u>	0.4634242	•	-9.04	!	
Styrene	1	,	0.9340824		-9.38		•
Xylene (Total)	1	0.5742025	•		-6.73		1
Ethyl Ether	!	:	0.1781756	:	-1.24		
Acrolein			0.0046767		17.09	•	
Freon TF		!	0.7262217	ļ	-7.91		
Isopropanol	0.0000000	·	<u> </u>		0.00		
Acetonitrile		0.0146881	1		-4.92	:	1
TBA	0.0190000	0.0199991	0.0199991	ļ	-5.26	50.00	AVRG
				l	l		

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Instrument ID: VOAMS2 Calibration Date: 01/26/07 Time: 1717

Lab File ID: B47513 Init. Calib. Date(s): 01/25/07 01/26/07

Init. Calib. Times: 1759 0010

		RRF50.000					
COMPOUND	RRF or	or	CCAL	MIN	%D or	MAX %D or	CURV
	AMOUNT	AMOUNT	RRF50.000	RRF	%DRIFT	%DRIFT	TYPE
	=======		======	=====	=====	=======	====
Acrylonitrile		0.0571010			-0.18	50.00	
MTBE		0.7010223	0.7010223		-5.89	50.00	
Hexane	0.0000000				0.00	50.00	!
DIPE		0.9341331			-2.43	50.00	
Ethyl Acetate		0.0386877	0.0386877		-4.56	50.00	
Vinyl Acetate		0.6121378	0.6121378		6.54	50.00	
Tetrahydrofuran	0.0000000				0.00		
Cyclohexane	ľ	0.4005345	0.4005345		-3.76		
Isobutanol	0.0000000				0.00	50.00	
Isopropyl Acetate		0.5478236	0.5478236		-5.76	50.00	
n-Heptane	0.0000000				0.00	50.00	•
n-Butanol	0.0000000				0.00	50.00	•
Propyl Acetate		0.4280669			-1.92	50.00	,
Butyl Acetate		0.6706508			-3.82	50.00	!
1,2-Dibromoethane	,	0.7890866	!		-3.42	50.00	
1,3-Dichlorobenzene		1.3318468			3.35	I.	•
1,4-Dichlorobenzene	ļ .	2.0026860	!		-10.04	50.00	
1,2-Dichlorobenzene		1.4784652			-3.10		
Naphthalene		1.8493342			-7.46		
Methylnaphthalene (total)		1.0765457			-7.65	!	!
Dimethylnaphthalene (total)_		,	0.5927189		-15.99	!	
Dichlorodifluoromethane			0.3568009		-1.36	!	
1,1-Dichloropropene			0.4724666		-4.30	,	
1,2,4-Trichlorobenzene			1.1758569		-8.27		
Hexachlorobutadiene	,	0.7958321	!		-9.02		
1,4-Dioxane		!	0.0028339		5.54	ļ.	!
Methyl Acrylate	0.0000000				0.00		:
1,1,1,2-Tetrachloroethane		0.6025973	}		-6.84		•
1,2,3-Trichlorobenzene			1.0535005		-10.78		
1,2,3-Trichloropropane			0.3254146		-1.69		
1,2,4-Trimethylbenzene			2.1211756		-3.62	!	
1,2-Dibromo-3-chloropropane_			0.2580742		-4.06		•
1,3,5-Trimethylbenzene		2.1572162			-3.61	!	
1,3-Dichloropropane			0.6900898		-2.08	!	
2,2-Dichloropropane			0.4989051		-8.46		
2-Chlorotoluene			1.5101197		1.17		
4-Chlorotoluene			2.5403840	!	-1.82	50.00	1
Bromobenzene			0.9942924	ļ	-1.46	50.00	•
Bromochloromethane		1	0.2540863	•	-2.45		
Dibromomethane			0.3800737		-1.35		
Isopropylbenzene		,	1.6423251	!	-7.13		:
n-Butylbenzene	2.4030000	2.4925056	2.4925056	ļ	-3.72	50.00	AVRG
2000 2 of 4	l		l	l	l	l	l

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Instrument ID: VOAMS2 Calibration Date: 01/26/07 Time: 1717

Lab File ID: B47513 Init. Calib. Date(s): 01/25/07 01/26/07

Init. Calib. Times: 1759 0010

	l	RRF50.000					
COMPOUND	RRF or	or	CCAL	MIN	%D or	MAX %D or	
	AMOUNT	TNUOMA	RRF50.000	RRF	%DRIFT	%DRIFT	TYPE
		l .	=======	=====		=======	
n-Propylbenzenep-Isopropyltoluene	3.0910000	3.1801999			-2.88	Į.	
p-Isopropyltoluene	2.3780000	2.4839267	2.4839267		-4.45		
cec-Ruty   benzene	3.0160000	2.9028954	2.9028954		3.75		
tert-Butylbenzene	2.2030000	2.3246228	2.3246228		-5.52		
Allyl chloride	0.0000000	<u> </u>			0.00		,
Benzyl chloride Epichlorohydrin Isoprene Methyl methacrylate	1.3410000	1.5040054	1.5040054		-12.16	ı	
Epichlorohydrin	0.0300000	0.0313316	0.0313316		-4.44		
Isoprene	0.2560000	0.2769020	0.2769020		-8.16		
Methyl methacrylate	0.0820000	0.0891300	0.0891300		-8.70	!	
n-Pentane	0.0420000	1	0.0428449		-2.01		
n-PentaneAllyl alcohol	0.0000000	)			0.00		
2-Octanol	[0.0000000				0.00		
2-Octanone	0.0000000				0.00		
Ethyl Acrylate	0.0000000				0.00		
Ethyl Acrylate	0.0000000				0.00		
					0.00		
Ethyl methacrylate  Ethanol  Methyl Acetate  Methyl cyclohexane  Cyclohexanone  p-Ethyltoluene	0.0000000			}	0.00		
Ethanol	0.0000000				0.00		,
Methyl Acetate	0.2650000		0.2869378		-8.28		
Methyl cyclohexane	0.4010000	0.4446367	0.4446367		-10.88	(	
Cyclohexanone	0.0000000	İ	l		0.00	!	
p-Ethyltoluene	0.0000000				0.00	1	
(T) - DICCIIY IDCIIZCIIC	10.000000				0.00		
1,2,4,5-Tetramethylbenzene	0.0000000				0.00		
Propylene Oxide	0.0000000	İ			0.00		
Propylene Oxide Camphene (total)	[0.0000000				0.00	!	
Camphor	0.0000000				0.00	1	
Amyl Acetate 2-Methylnaphthalene	0.0000000				0.00		
2-Methylnaphthalene	0.0000000				0.00		
1-Chlorohexane	0.0000000				0.00		
1-Chlorohexane Chlorotrifluoromethane	~ o.oooooo				0.00		
Chlorodifluoromethane	[0.0000000			ļ	0.00	!	
tert-Amylmethyl Ether	0.0000000				0.00	,	
Iodomethane	0.0000000				0.00		
trans-1,4-Dichloro-2-butene	0.0000000			.[	0.00		
Acetaldehyde				.]	0.00		•
1,3,5-Trichlorobenzene	0.0000000			.]	0.00		
1,2-Dichlorotrifluoroethane	_ o.oooooo	)		. [	0.00		AVRO
1-Bromo-2-chloroethane	- o.oooooo			.	0.00		AVRO
4-Chlorobenzotrifluoride	- o.oooooo				0.00	•	AVRO
2-Chloropropene	_ o.oooooo			. ]	0.00	ļ.	AVRO
tert-Butyl ethyl ether				0.01	0.00	50.00	AVRO
	-				1		_

page 3 of 4

Instrument ID: VOAMS2 Calibration Date: 01/26/07 Time: 1717

Init. Calib. Times: 1759 0010

COMPOUND	RRF or	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	TYPE
1,3-Butadiene	0.0000000		======== 	0.01	0.00	50.00	====     AVRG
=====================================	0.3360000	!	=======  0.3327967  1.1939520	====	0.95 -2.13	50.00 50.00	
***************************************	1.0930000	l .			1.04	50.00	!!!

page 4 of 4

Surrogate Compound Recovery Summary

# VOLATILE SYSTEM MONITORING COMPOUND RECOVERY METHOD 8260B

Matrix: WATER Level: LOW Lab Job No: B620

SAMPLE NO. # # # # OUT  BV026A 96 94 99 0  02 798091 95 99 97 0  03 04 05 06 07 08 09 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		LAB	S1	S2	S3	OTHER	TOT
01 BV026A 96 94 99 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0						OTHER	
01 BV026A 96 94 99 0 0 02 798091 95 99 97 0 03 04 05 06 07 08 09 09 00 00 00 00 00 00 00 00 00 00 00					ŀ		
02       798091       95       99       97       0         03       04       05       06       07       08       09       0       09       0       09       0       09       0       09       0        0       0       0       0       0       0       0       0       0       0       0       0       0       0       0        0<	0.1						
03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29		700001	90				
04	02	798091	95	99	97		ال
06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	0.3	·					
06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	04						
07	0.5						
08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	06						
09       —	07						
10	08						
11							
12	10	<u> </u>	***				
13	11					:	
14       15       16       17       18       19       20       21       22       23       24       25       26       27       28       29	12						
15	13						
16	14						
17 18 19 20 21 21 22 23 24 25 26 27 28 29	15						
18       19       20       21       22       23       24       25       26       27       28       29	16						
18       19       20       21       22       23       24       25       26       27       28       29	17	-					
19	18						
20	19						
21	20						
22							i—i
24	22						
24	23						
25	24						
26	25	<del></del>					
27 28 29	25			<del></del>			
28 29	27						
29	20						
29	∠8						
	29						
30	30		l			l	ll

QC LIMITS
S1 = 1,2-Dichloroethane-d4 (65-144)
S2 = Toluene-d8 (63-141)
S3 = Bromofluorobenzene (60-146)

- # Column to be used to flag recovery values
- \* Values outside of contract required QC limits
- D System Monitoring Compound diluted out

page 1 of 1

Spike Recovery Summary

#### VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY METHOD 8260B

Matrix Spike - Lab Sample No.: 803149 Matrix: WATER

MS Sample from Lab Job No: C339 Level: LOW

QA Batch: 4743

	SPIKE	SAMPLE	MS	MS	QC.
	ADDED	CONCENTRATION	CONCENTRATION	왕	LIMITS
Compound	(ug/L)	(ug/L)	(ug/L)	REC #	REC.
=======================================	= =======	=======================================	==========	=====	=====
Vinyl Chloride	50	0.00	59	118	57-144
1,1-Dichloroethene	50	0.00	51	102	70-135
Methylene Chloride	50	0.00	53	106	76-132
MTBE	50	0.00	58	116	70-130
1,1-Dichloroethane	50	0.00	52	104	65-139
Bromochloromethane	50	0.00	54	108	70-130
Chloroform	50	11	65	108	73-131
Benzene	50	0.00	55	110	76-131
Trichloroethene	50	0.00	54	108	70-134
1,2-Dichloropropane	50	0.00	58	116	73-130
Toluene	50	0.00	58	116	70-131
Tetrachloroethene	50	0.00	48	96	60-145
Chlorobenzene	50	0.00	57	114	78-130
Ethylbenzene	50	0.00	57	114	75-134
Isopropylbenzene	50	0.00	58	116	70-130
1,3-Dichlorobenzene	50	0.00	52	104	78-128

_	SPIKE ADDED	MSD CONCENTRATION	MSD %	& 		IMITS
Compound	(ug/L)	(ug/L)	REC #	RPD #	RPD	REC.
Vinyl Chloride	50	57	114	3	40	57-144
1,1-Dichloroethene	50	49	98	4	40	70-135
Methylene Chloride	50	53	106	Ō	40	76-132
MTBE	50	60	120	3	40	70-130
1,1-Dichloroethane	50	50	100	4	40	65-139
Bromochloromethane	50	54	108	0	40	70-130
Chloroform	50	64	106	2	40	73-131
Benzene	50	54	108	2	40	76-131
Trichloroethene	50	54	108	0	40	70-134
1,2-Dichloropropane	50	58	116	0	40	73-130
Toluene	50	57	114	2	40	70-131
Tetrachloroethene	50	48	96	0	40	60-145
Chlorobenzene	50	58	116	2	40	78-130
Ethylbenzene	50	59	118	3	40	75-134
Isopropylbenzene	50	58	116	0	40	70-130
1,3-Dichlorobenzene	50	52	104	0	40	78-128
						l

<sup>#</sup> Column to be used to flag recovery and RPD values with an asterik
\* Values outside of QC limits

RPD: 0 out of 16 outside limits

Spike Recovery: 0 out of 32 outside limits

Internal Standard Area and RT Summary

#### VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B47513

Date Analyzed: 01/26/07

Instrument ID: VOAMS2

Time Analyzed: 1717

	IS1 AREA #	RT #	IS2(CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
	=======	======	=======	======	=======	======
12 HOUR STD UPPER LIMIT	2961820 5923640	7.86 8.36	2098179 4196358	11.45 11.95	1251671 2503342	13.90 14.40
LOWER LIMIT	1480910	7.36	1049090	10.95	625836	13.40
LABORATORY SAMPLE NO.		======	======	======	=======	
01 BV026A	2632446	7.87	1960225	11.45	1043983	13.92 13.90
02 798091 03	2933762	7.85	2214598	11.45	1217541	13.90
04 05						
06						
07						·
09						
10				<del></del>		
11 12						
13						
15 16						
17						
18						
20						
21 22						

IS1 = Fluorobenzene

IS2 (CBZ) = Chlorobenzene-d5

IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT RT LOWER LIMIT = - 0.50 minutes of internal standard RT

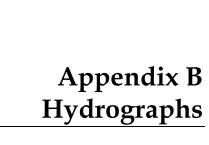
# Column used to flag values outside QC limits with an asterisk.

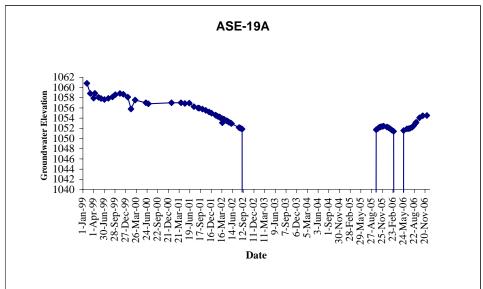
\* Values outside of QC limits.

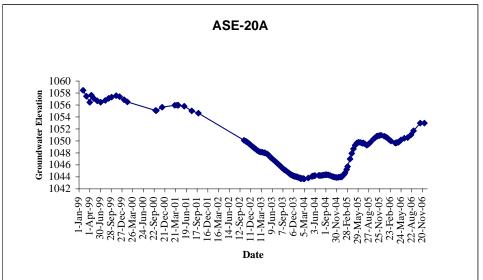
page 1 of 1

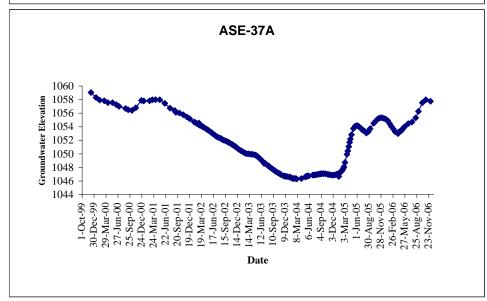
69

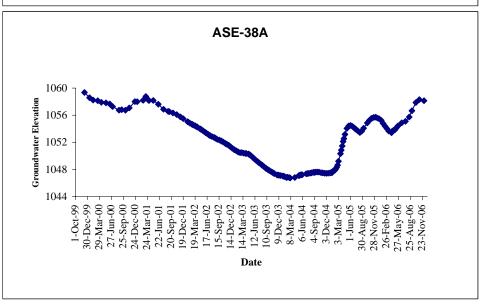
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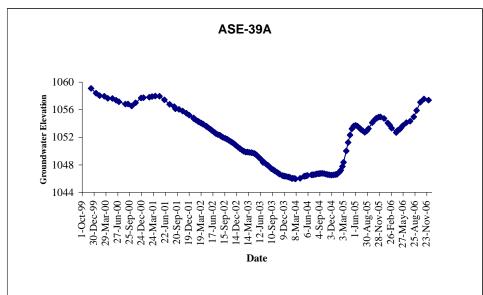


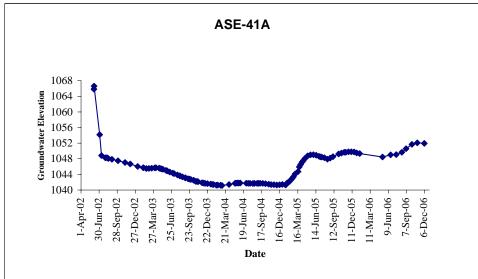


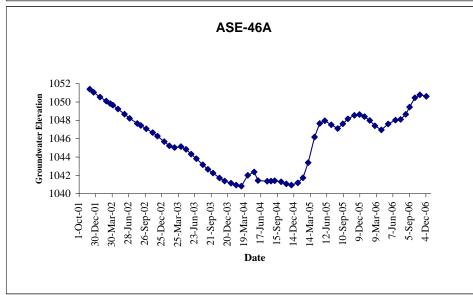


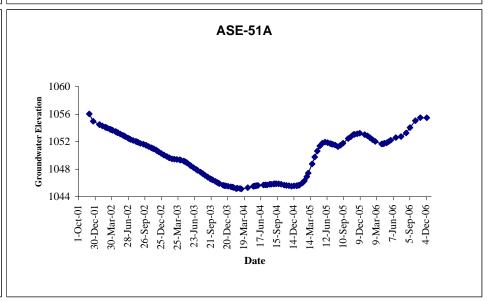


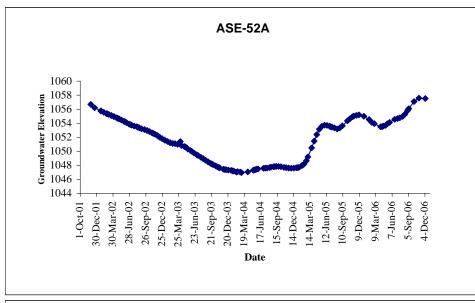


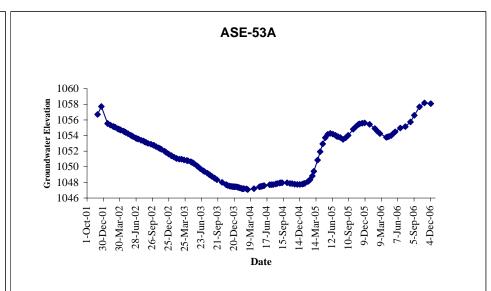


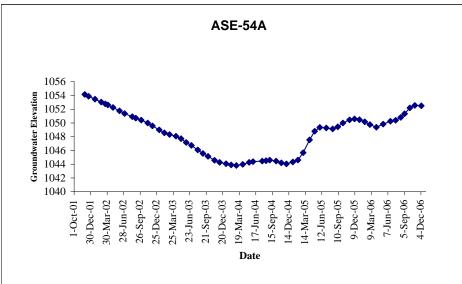


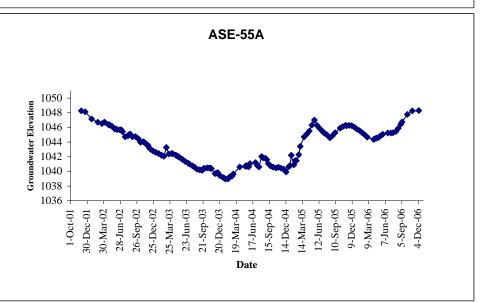


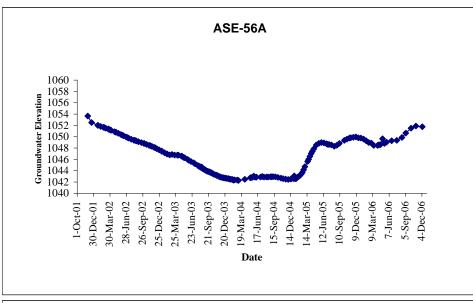


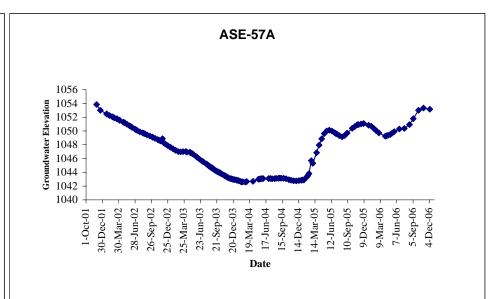


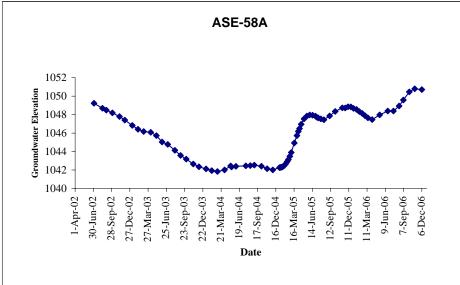


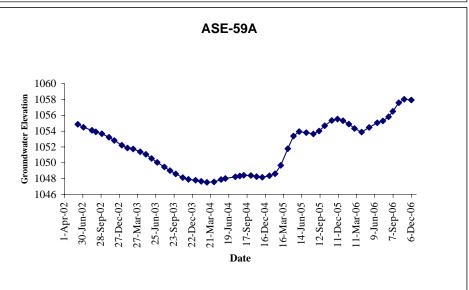


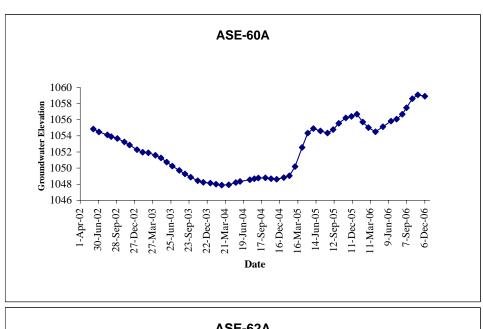


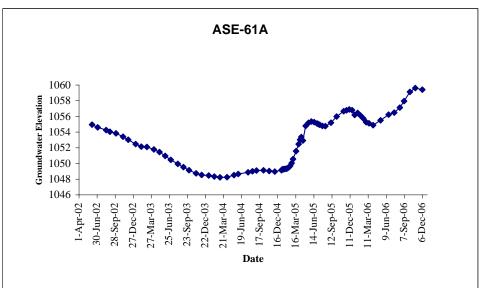


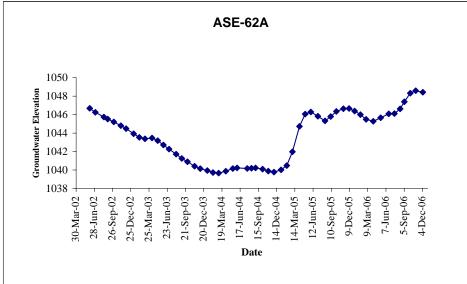


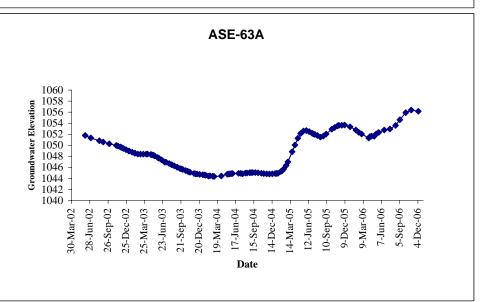


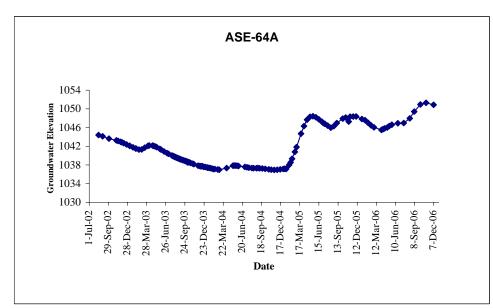


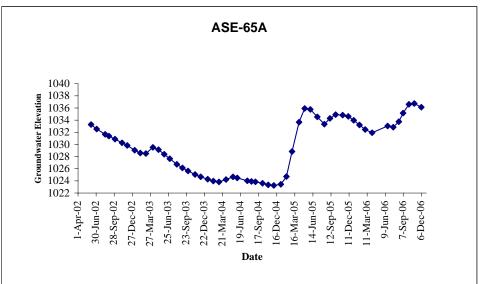


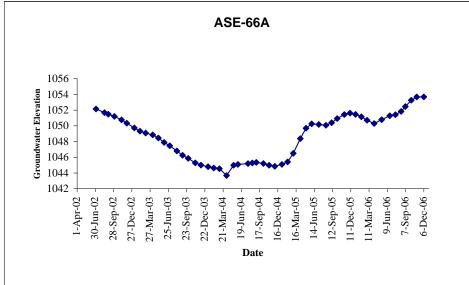


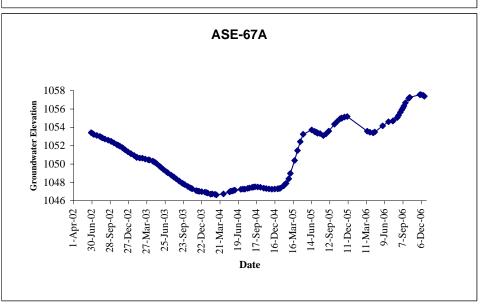


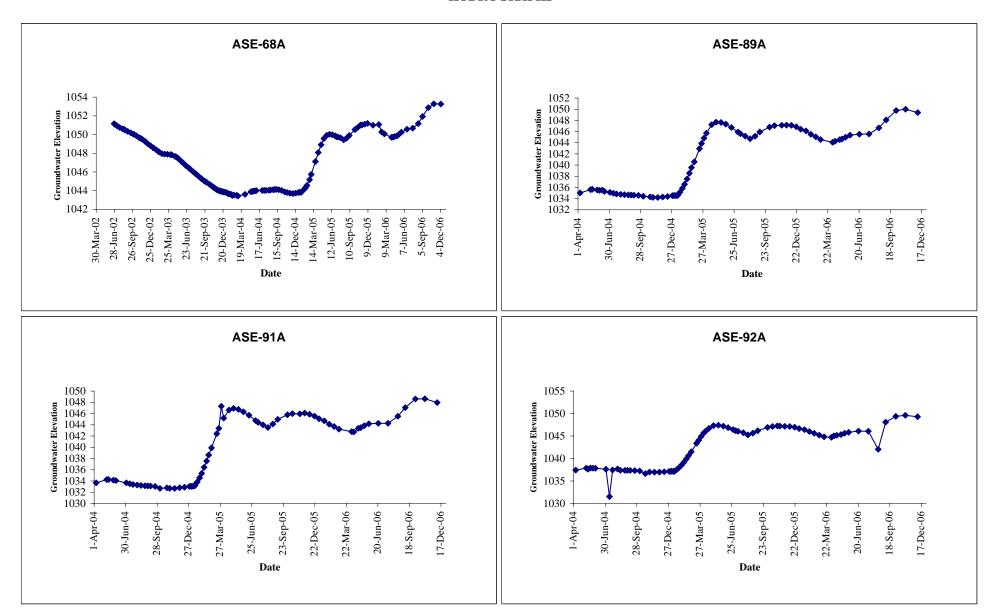












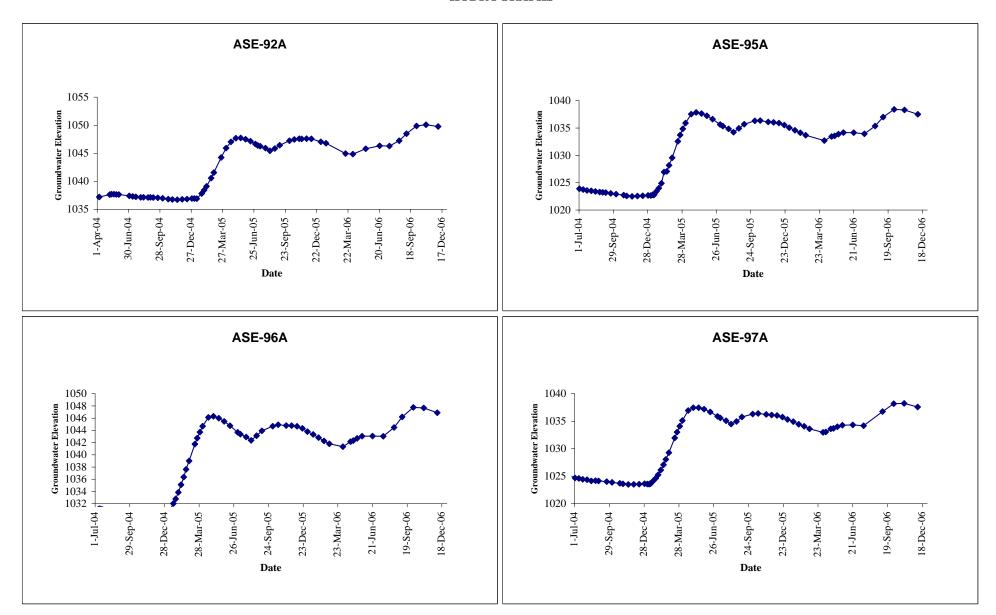


FIGURE 1 HYDROGRAPHS

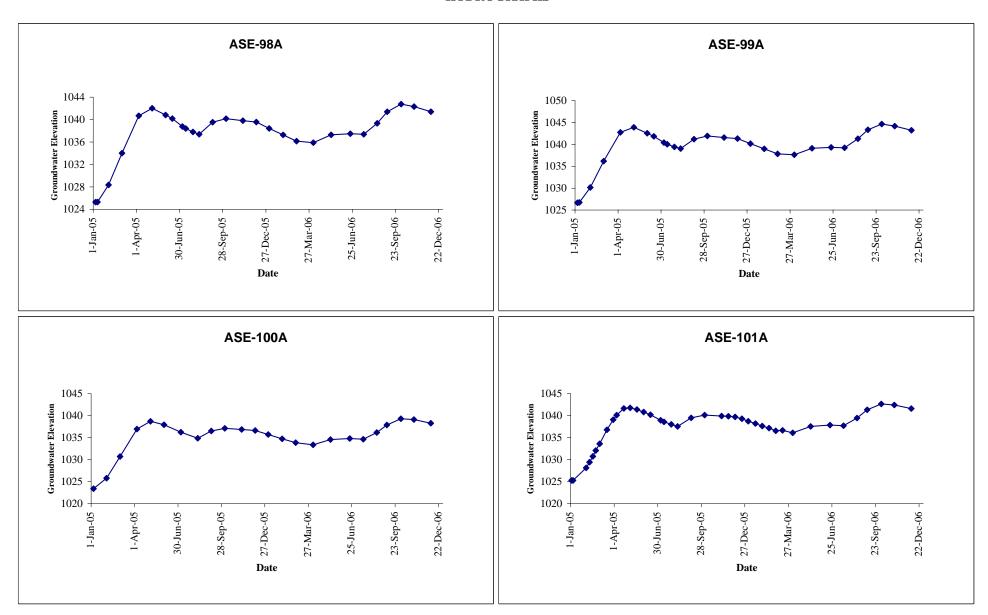
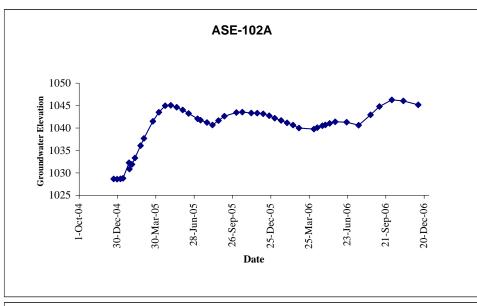
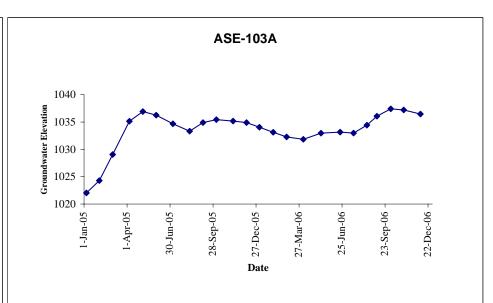
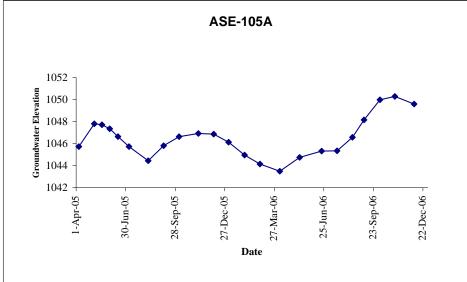


FIGURE 1 HYDROGRAPHS







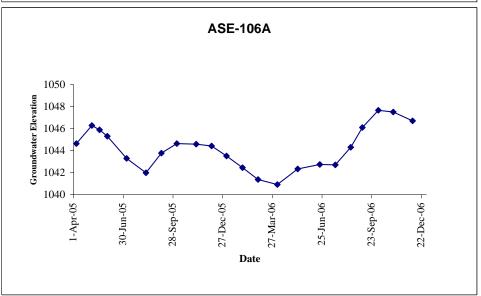


FIGURE 1 HYDROGRAPHS

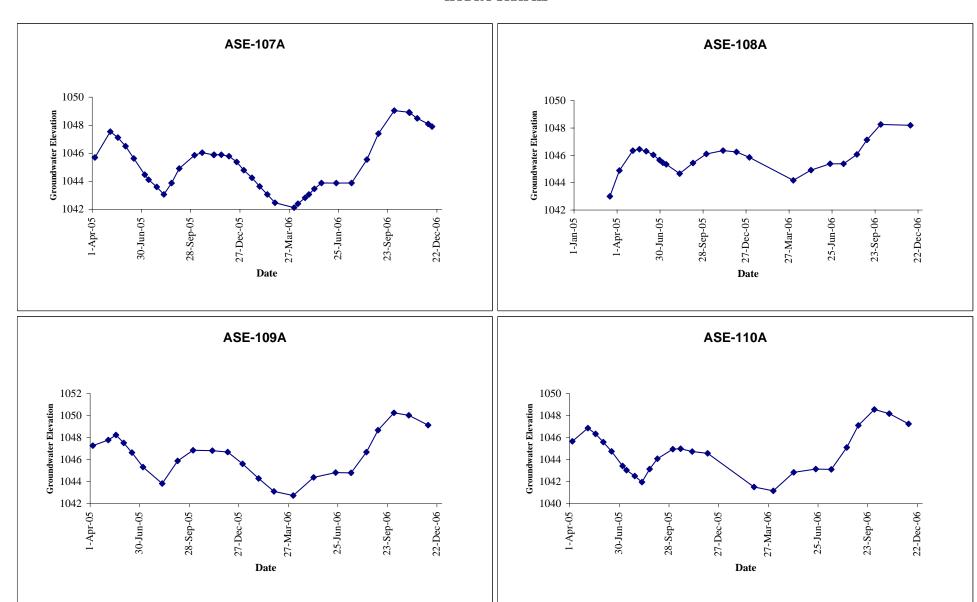


FIGURE 1 HYDROGRAPHS

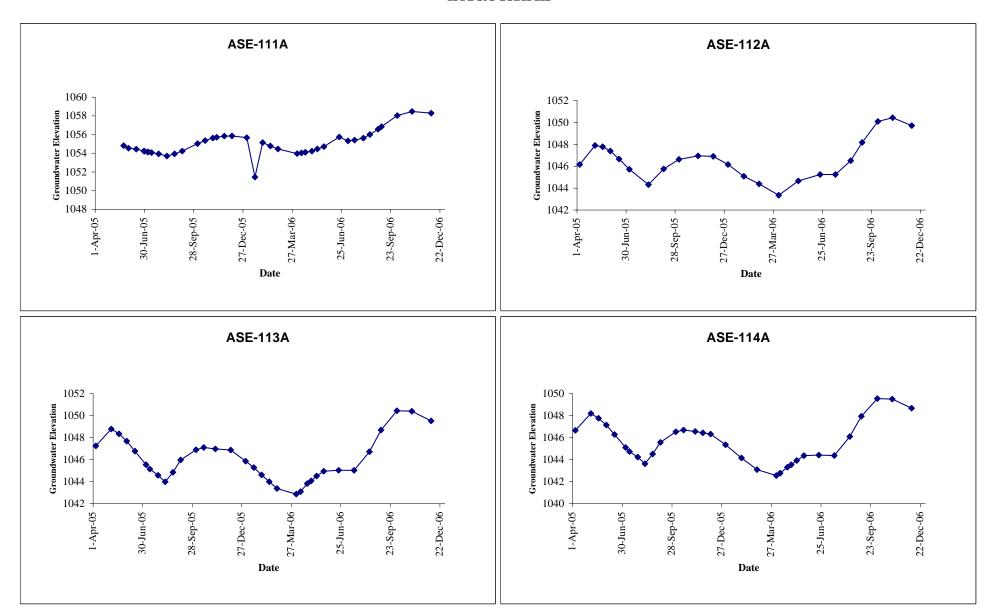


FIGURE 1 HYDROGRAPHS

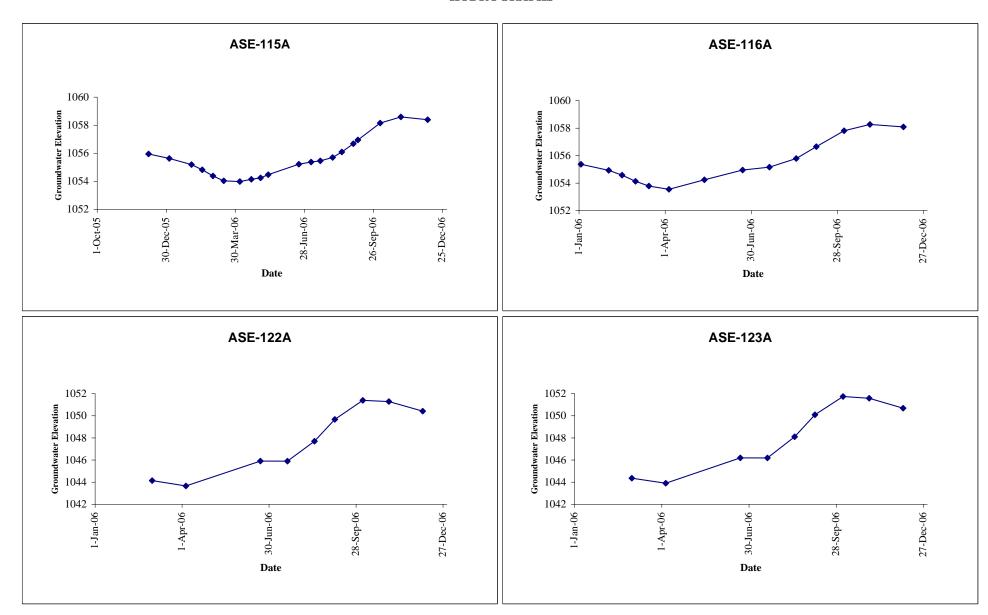


FIGURE 1 HYDROGRAPHS

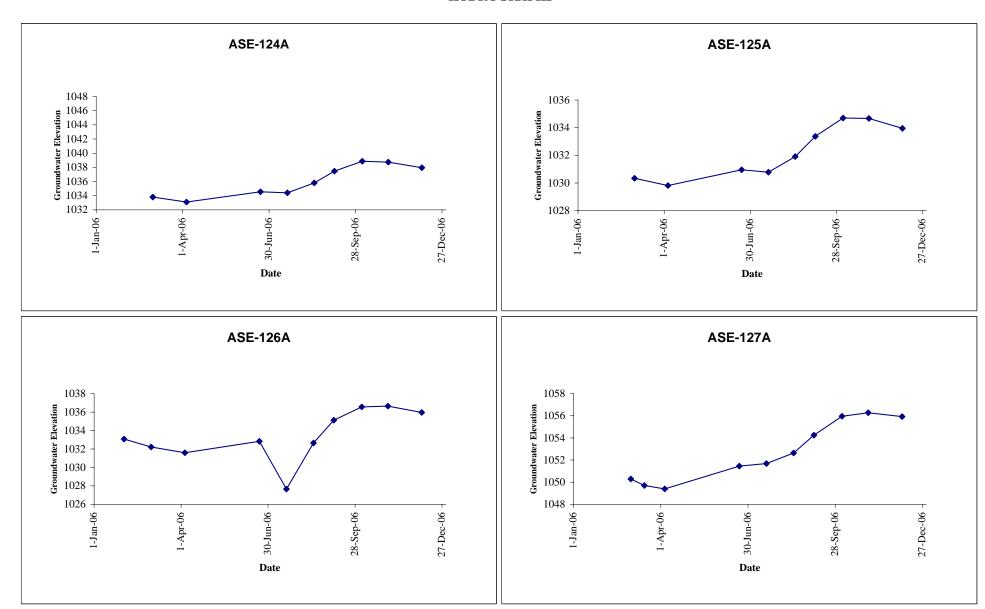
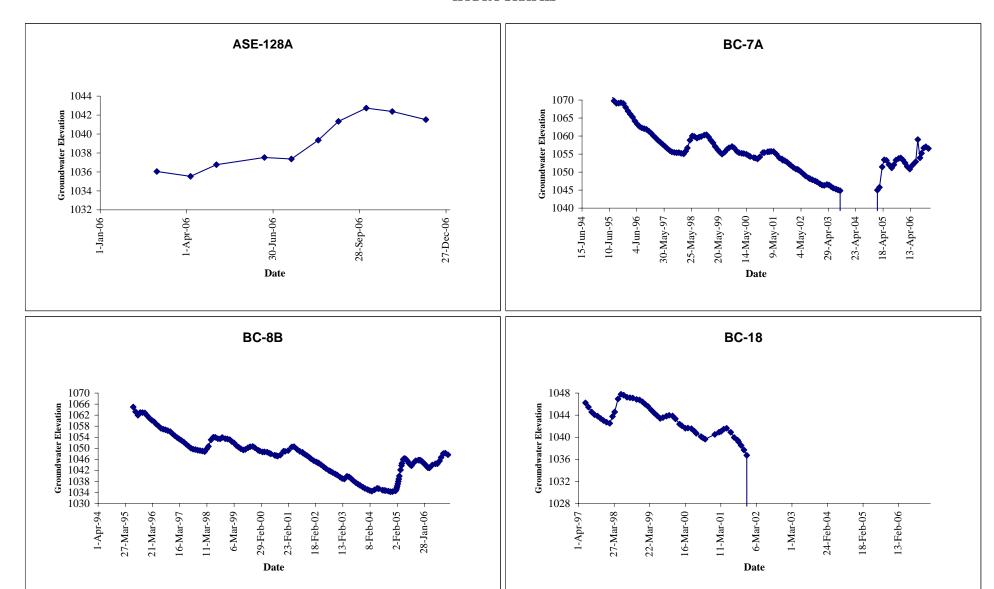
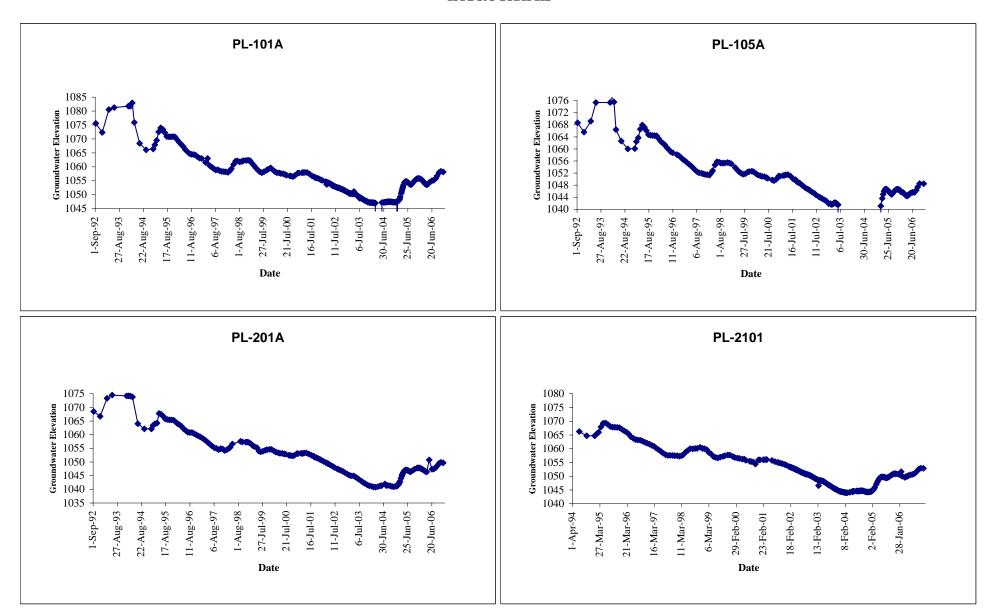
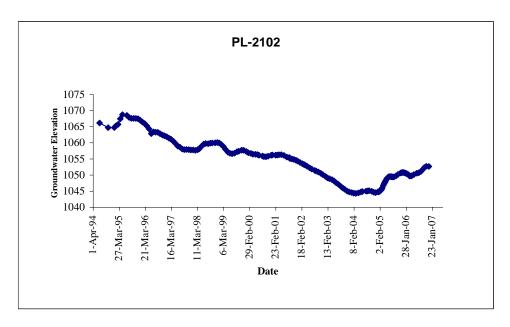


FIGURE 1 HYDROGRAPHS







# Fourth Quarter Status Report for 2006 Honeywell 34th Street Facility Facility ID No. 0-002227 LUST File Nos. 0393.02-.10, .15-.17

# Volume 2 of 2

Prepared for

# Honeywell International Inc.

February 2007



Prepared by



Appendix C Data Validation and Laboratory Analytical Reports

# Honeywell Sky Harbor December 2006 UST Monitoring Data Quality Evaluation Report

# Introduction

The objective of this Data Quality Evaluation (DQE) report is to assess the data quality of analytical results for water samples collected for the UST monitoring period at the Honeywell Sky Harbor site in December 2006. Samples were collected and analyzed in an effort to continue providing a framework for long-term monitoring of the site. The data may also be used to support future activities such as feasibility studies, risk assessments, fate and transport modeling and remedial actions. Individual method requirements, guidelines from the USEPA Contract Laboratory National Functional Guidelines (NFG) for Organic Data Review, October 1999, the USEPA Contract Laboratory NFG for Inorganic Data Review, October 2004, and the Honeywell International Inc., Sky Harbor 34th Street Facility, Quality Assurance Project Plan (QAPP), July 2005, were used as the basis for this assessment.

This report is intended as a general data quality assessment designed to summarize data issues.

# **Analytical Data**

This DQE report covers 62 normal environmental samples, one equipment blank (EB), 7 trip blanks (TB), and 7 field duplicate (FD) samples. The list of samples and collection dates are included in Attachment A at the end of this report. Samples were collected between December 6, 2006 and December 15, 2006. These sample results were reported as seven sample delivery groups (SDG) listed in Table 1. The analyses were performed by Columbia Analytical Services located in Redding, California (CAS).

Table 1 – SDGs by Laboratory					
SDG	Laboratory				
D0602003	CAS				
D0602022	CAS				
D0602039	CAS				
D0602054	CAS				
D0602066	CAS				
D0602089	CAS				
D0602091	CAS				

Three methods were used to analyze the environmental samples. Samples were collected and shipped by overnight carrier to the laboratory for analysis. Selected samples were analyzed for one or more of the following analytes/methods:

Table 2 – Analytical Parameters				
Parameter	Method	Laboratory		
Volatile Organic Compounds (VOC)	SW8260	CAS		
Polynuclear Aromatic Hydrocarbons (PAH)	SW8310	CAS		
Total Petroleum Hydrocarbons (TPH) (diesel and motor oil)	SW8015	CAS		

Data validation was performed in accordance with the USEPA Contract Laboratory NFG for Inorganic Data Review (2004) and Contract Laboratory NFG for Organic Data Review (1999), substituting the calibration and quality control requirements specified in the Sky Harbor QAPP for those specified in the NFG.

The assessment of data includes a review of: (1) the chain-of-custody (CoC) documentation; (2) holding-time compliance; (3) the required field and laboratory quality control (QC) samples; (4) flagging for method blanks; (5) laboratory control sample/laboratory control sample duplicates (LCS/LCSD); (6) surrogate spike recoveries for organic analyses; and, (7) matrix spike/matrix spike duplicate samples (MS/MSD).

Field samples were also reviewed to ascertain field compliance and data quality issues. This included a review of FDs, EBs and TBs.

Data flags are assigned according to the Sky Harbor QAPP. These flags, as well as the reason for each flag, are entered into the electronic database. Multiple flags are routinely applied to specific sample method/matrix/analyte combinations, but there will be only one final flag. A final flag is applied to the data and is the most conservative of the applied validation flags. The final flag also includes matrix and blank sample impacts.

The data flags are defined below:

- J = Analyte was present but reported value may not be accurate or precise.
- R = The result was rejected.
- U = This analyte was analyzed for but not detected at the specified detection limit.
- UJ = The analyte was not detected above the detection limit objective. However, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample

# **Findings**

The overall summaries of the data validation findings are contained in the following sections below and summarized in Table 5.

# **Holding Times**

All holding-time criteria were met.

# Sample Quantitation

The Sky Harbor QAPP reporting limit (RL) objectives were met for all undiluted analyses.

Several samples required dilution due to high analyte concentrations. The RLs for non-detected analytes in the diluted samples were raised accordingly. Table 3 lists the samples analyzed at a dilution.

Table 3 – Samples Analyzed Diluted				
Method	Sample ID	Dilution Factor		
SW8015	ASE-55A-6D2	10		
SW8260	ASE-106A-6D2	10		
SW8260	ASE-115A-6D2	40		
SW8260	ASE-116A-6D2	10		
SW8260	ASE-38A-6D2	40		
SW8260	ASE-39A-6D2	40		
SW8260	ASE-51A-6D2	10		
SW8260	ASE-52A-6D2	10		
SW8260	ASE-56A-6D2	10		
SW8260	ASE-57A-6D2	10		
SW8260	ASE-63A-6D2	40		
SW8260	ASE-89A-6D2	40		
SW8260	ASE-90A-6D2	40		
SW8260	ASE-92A-6D2	10		
SW8260	ASE-95A-6D2	10		
SW8260	ASE-96A-6D2	10		
SW8260	PL-101A-6D2	40		
SW8260	PL-508-6D2	40		
SW8310	ASE-115A-6D2	5		
SW8310	ASE-116A-6D2	3		

### Calibration

Calibration information was not supplied in the Level II validation reports and could not be directly verified to have met QAPP control criteria. However, the laboratory case narratives and/or footnotes in the laboratory data packages were reviewed by the data validator and there were a few exceptions noted.

The recovery of a continuing calibration verification (CCV) standard was below criteria for dibenzo(a,h)anthracene by method SW8310, indicating the associated sample results are possibly biased low. Two associated non-detected results were qualified as estimated and flagged "UJ".

Four analytes were reported above the linear calibration range for method SW8260. The diluted analyses of these three samples were performed outside of holding time and were not reported. The four detected results in the original analyses were reported as estimated and flagged "J".

### Method Blanks

Method blanks were analyzed at the required frequency and were free of contamination with one exception.

Chloroform was detected below the RL in a method blank for method SW8260. Seven associated samples were detected for chloroform at concentrations less than five times the blank concentration. The results were qualified as not detected and flagged "U".

#### Field Blanks

EBs and TBs were collected as a percentage of the overall number of field samples collected and not on a site, location or daily basis. The associated field samples were evaluated against the maximum concentration detected in the field blanks. The field blanks were free of contamination with the following exceptions:

Six analytes were detected below the RL in the EB for method SW8260. Forty-two associated results were detected less than five times (10 times for acetone) the blank concentrations. The results were qualified as not detected and flagged "U".

Acetone was detected below the RL in the TBs for method SW8260. Twenty-two associated results were detected less than 10 times the blank concentrations. The results were qualified as not detected and flagged "U".

# **Field Duplicates**

Seven FD sets were collected and analyzed with this event. Only detected analytes in the FD pair were evaluated. All relative percent difference (RPD) criteria were met.

A list of FDs and associated parent samples is included below.

Table 4 – List of Field Duplicates				
Field Duplicate Sample ID Associated Parent Sample ID				
PL-502-6D2	ASE-122A-6D2			

Table 4 – List of Field Duplicates					
Field Duplicate Sample ID	Associated Parent Sample ID				
PL-503-6D2	ASE-105A-6D2				
PL-504-6D2	ASE-46A-6D2				
PL-505-6D2	ASE-108A-6D2				
PL-506-6D2	ASE-64A-6D2				
PL-507-6D2	ASE-68A-6D2				
PL-508-6D2	ASE-38A-6D2				

# Surrogates

Surrogates were recovered within laboratory established QC limits.

# **Laboratory Control Samples**

LCS/LCSDs were analyzed as required and generally met QC criteria.

The recoveries of n-butylbenzene and hexachlorobutadiene were below criteria in the LCS/LCSD sets for method SW8260, indicating the associated sample results are possibly biased low. Associated results were qualified as estimated, two detected results were flagged "J" and 14 non-detected results were flagged "UJ".

# **Matrix Spikes**

The results of MS/MSD analyses provide information about the possible influence of the matrix on either accuracy or precision of the measurements. In general, MS/MSD recoveries and the associated RPD met criteria. Below are summaries of incidences where either the recovery or RPD did not meet criteria that resulted in data qualification.

The MS performed on sample ASE-115A-6D2 for method SW8015 was recovered less than criteria for TPH-diesel. The associated detected sample result was qualified as estimated and "J" flagged.

The MS and MSD performed on sample ASE-51A-6D2 for method SW8260 was recovered less than criteria for four analytes. The associated non-detected sample results were qualified as estimated and "UJ" flagged. Additionally, the RPD for the MS/MSD pair did not meet criteria for acetone and the associated detected result was flagged "J".

#### Confirmation

The confirmation RPD criterion was exceeded for fluorene in two samples and for pyrene in one sample. The detected results were qualified as estimated and "J" flagged.

#### Internal Standards

Internal standard data was not supplied and could not be directly verified to have met QAPP control criteria. The laboratory case narratives and/or footnotes in the laboratory data package were reviewed by the data validator. No sample data were qualified based on the case narrative/footnote review for this event.

# **Tentatively Identified Compounds**

Tentatively identified compounds were not reported by the laboratory.

# Chain of Custody

Each sample was documented in a completed CoC and received at the laboratory in good condition.

### Overall Assessment

The goal of this assessment is to demonstrate that a sufficient number of representative samples were collected and the resulting analytical data can be used to support the decision-making process. The procedures for assessing the precision, accuracy, representativeness, completeness, and comparability parameters were based on the USEPA Contract Laboratory NFG for Inorganic Data Review (2004) and Contract Laboratory NFG for Organic Data Review (1999). The following summary highlights the PARCC findings for the above-defined events:

- Less than two percent of the data were qualified due to low-level blank contamination.
   The degree to which blank contamination was observed is within reasonable method expectations.
- 2. Seventeen samples for method SW8260, one sample for method SW8015, and two samples for method SW8310, were analyzed diluted resulting in raised RLs for non-detected analytes.
- 3. A CCV exceedance was noted in the case narratives, resulting in two results qualified as estimated for method SW8310.
- 4. Four results were qualified as estimated for method SW8260 because they were reported above the linear calibration range.
- 5. LCS/LCSD recovery exceedances for method SW8260 resulted in 16 results qualified as estimated.
- 6. Confirmation RPD exceedances for method SW8310 resulted in three results qualified as estimated.
- 7. MS/MSD recovery and RPD exceedances for methods SW8015 and SW8260 suggest matrix effect in several samples; six results were qualified as estimated.
- 8. The precision and accuracy of the data, as measured by field and laboratory QC indicators, suggest that the project goals have been met

**Table 5 - Validation Findings** 

METHOD	NativeID	Analyte	Final Result	Units	Final Flag	Validation Reason
SW8015	ASE-115A-6D2	C10 - C22 DRO	720	ug/L	J	MSL
SW8260	ASE-101A-6D2	Acetone	1.2	ug/L	U	TBL
SW8260	ASE-102A-6D2	Acetone	1.1	ug/L	U	TBL
SW8260	ASE-106A-6D2	Tetrachloroethene	0.91	ug/L	U	EBL
SW8260	ASE-107A-6D2	1,2-Dichlorobenzene	0.18	ug/L	U	EBL
SW8260	ASE-107A-6D2	1,4-Dichlorobenzene	0.44	ug/L	U	EBL
SW8260	ASE-107A-6D2	Acetone	1.1	ug/L	U	TBL, EBL
SW8260	ASE-107A-6D2	Chlorobenzene	2.9	ug/L	U	EBL
SW8260	ASE-107A-6D2	Tetrachloroethene	1.2	ug/L	U	EBL
SW8260	ASE-108A-6D2	Chloroform	0.21	ug/L	U	LBL
SW8260	ASE-109A-6D2	Tetrachloroethene	0.86	ug/L	U	EBL
SW8260	ASE-111A-6D2	Acetone	2.2	ug/L	U	TBL
SW8260	ASE-111A-6D2	Benzene	130	ug/L	J	LR
SW8260	ASE-111A-6D2	Chloroform	0.8	ug/L	U	LBL
SW8260	ASE-111A-6D2	Tert-butylmethylether	110	ug/L	J	LR
SW8260	ASE-112A-6D2	Acetone	1.1	ug/L	U	TBL
SW8260	ASE-113A-6D2	1,4-Dichlorobenzene	0.13	ug/L	U	EBL
SW8260	ASE-113A-6D2	Chlorobenzene	0.27	ug/L	U	EBL
SW8260	ASE-113A-6D2	Tetrachloroethene	1.8	ug/L	U	EBL
SW8260	ASE-113A-6D2	Toluene	0.16	ug/L	U	EBL
SW8260	ASE-114A-6D2	Chlorobenzene	0.17	ug/L	U	EBL
SW8260	ASE-114A-6D2	Tetrachloroethene	2	ug/L	U	EBL
SW8260	ASE-114A-6D2	Toluene	0.16	ug/L	U	EBL
SW8260	ASE-115A-6D2	Acetone	2.6	ug/L	U	TBL
SW8260	ASE-115A-6D2	Chloroform	0.35	ug/L	U	LBL
SW8260	ASE-116A-6D2	Acetone	1.5	ug/L	U	TBL
SW8260	ASE-122A-6D2	Chlorobenzene	0.16	ug/L	U	EBL
SW8260	ASE-122A-6D2	Tetrachloroethene	1.4	ug/L	U	EBL
SW8260	ASE-122A-6D2	Toluene	0.16	ug/L	U	EBL
SW8260	ASE-123A-6D2	Tetrachloroethene	0.56	ug/L	U	EBL
SW8260	ASE-124A-6D2	Chlorobenzene	0.17	ug/L	U	EBL
SW8260	ASE-124A-6D2	Tetrachloroethene	0.92	ug/L	U	EBL
SW8260	ASE-125A-6D2	1,4-Dichlorobenzene	0.2	ug/L	U	EBL
SW8260	ASE-125A-6D2	Chlorobenzene	0.29	ug/L	U	EBL
SW8260	ASE-125A-6D2	Tetrachloroethene	1.1	ug/L	U	EBL
SW8260	ASE-125A-6D2	Toluene	0.28	ug/L	U	EBL
SW8260	ASE-128A-6D2	Chlorobenzene	0.17	ug/L	U	EBL
SW8260	ASE-128A-6D2	Tetrachloroethene	0.32	ug/L	U	EBL
SW8260	ASE-20A-6D2	Hexachlorobutadiene	1	ug/L	UJ	LCSL, LCSDL
SW8260	ASE-20A-6D2	n-Butylbenzene	5	ug/L	UJ	LCSL, LCSDL
SW8260	ASE-37A-6D2	Acetone	1.1	ug/L	U	TBL
SW8260	ASE-38A-6D2	Acetone	1.9	ug/L	U	TBL
SW8260	ASE-38A-6D2	Chloroform	0.26	ug/L	U	LBL
SW8260	ASE-39A-6D2	Acetone	2	ug/L	U	TBL
SW8260	ASE-41A-6D2	Naphthalene	110	ug/L	J	LR

METHOD	NativelD	Analyte	Final Result	Units	Final Flag	Validation Reason
SW8260	ASE-46A-6D2	Acetone	1.1	ug/L	U	TBL
SW8260	ASE-51A-6D2	Acetone	2.9	ug/L	J	MSDP
SW8260	ASE-51A-6D2	Bromoform	5	ug/L	UJ	MSL, MSDL
SW8260	ASE-51A-6D2	cis-1,3-Dichloropropene	2	ug/L	UJ	MSDL
SW8260	ASE-51A-6D2	Dibromochloromethane	2	ug/L	UJ	MSL, MSDL
SW8260	ASE-51A-6D2	Hexachlorobutadiene	1	ug/L	UJ	LCSL, LCSDL
SW8260	ASE-51A-6D2	n-Butylbenzene	5	ug/L	UJ	LCSL, LCSDL
SW8260	ASE-51A-6D2	Styrene	2	ug/L	UJ	MSDL
SW8260	ASE-52A-6D2	Hexachlorobutadiene	1	ug/L	UJ	LCSL, LCSDL
SW8260	ASE-52A-6D2	n-Butylbenzene	5	ug/L	UJ	LCSL, LCSDL
SW8260	ASE-53A-6D2	Hexachlorobutadiene	1	ug/L	UJ	LCSL, LCSDL
SW8260	ASE-53A-6D2	n-Butylbenzene	5	ug/L	UJ	LCSL, LCSDL
SW8260	ASE-56A-6D2	Acetone	2.6	ug/L	U	TBL
SW8260	ASE-57A-6D2	Acetone	2.9	ug/L	U	TBL
SW8260	ASE-62A-6D2	Chloroform	0.36	ug/L	U	LBL
SW8260	ASE-65A-6D2	Hexachlorobutadiene	1	ug/L	UJ	LCSL, LCSDL
SW8260	ASE-65A-6D2	n-Butylbenzene	5	ug/L	UJ	LCSL, LCSDL
SW8260	ASE-66A-6D2	Hexachlorobutadiene	1	ug/L	UJ	LCSL, LCSDL
SW8260	ASE-66A-6D2	n-Butylbenzene	5	ug/L	UJ	LCSL, LCSDL
SW8260	ASE-68A-6D2	Hexachlorobutadiene	1	ug/L	UJ	LCSL, LCSDL
SW8260	ASE-68A-6D2	n-Butylbenzene	7	ug/L	J	LCSL, LCSDL
SW8260	ASE-89A-6D2	Acetone	2.3	ug/L	U	TBL
SW8260	ASE-90A-6D2	Acetone	1.2	ug/L	U	TBL
SW8260	ASE-91A-6D2	1,1-Dichloroethane	120	ug/L	J	LR
SW8260	ASE-95A-6D2	1,4-Dichlorobenzene	0.16	ug/L	U	EBL
SW8260	ASE-95A-6D2	Acetone	1.1	ug/L	U	TBL, EBL
SW8260	ASE-95A-6D2	Chlorobenzene	0.27	ug/L	U	EBL
SW8260	ASE-95A-6D2	Tetrachloroethene	0.64	ug/L	U	EBL
SW8260	ASE-95A-6D2	Toluene	0.2	ug/L	U	EBL
SW8260	ASE-96A-6D2	1,4-Dichlorobenzene	0.17	ug/L	U	EBL
SW8260	ASE-96A-6D2	Chlorobenzene	0.45	ug/L	U	EBL
SW8260	ASE-96A-6D2	Tetrachloroethene	0.5	ug/L	U	EBL
SW8260	ASE-96A-6D2	Toluene	0.17	ug/L	U	EBL
SW8260	ASE-98A-6D2	Chlorobenzene	0.18	ug/L	U	EBL
SW8260	ASE-98A-6D2	Tetrachloroethene	0.29	ug/L	U	EBL
SW8260	ASE-98A-6D2	Toluene	0.16	ug/L	U	EBL
SW8260	ASE-99A-6D2	Chlorobenzene	0.2	ug/L	U	EBL
SW8260	ASE-99A-6D2	Tetrachloroethene	0.26	ug/L	U	EBL
SW8260	BC-8B-6D2	Acetone	1.1	ug/L	U	TBL
SW8260	PL-101A-6D2	Acetone	2.1	ug/L	U	TBL
SW8260	PL-502-6D2	Acetone	1.1	ug/L	U	TBL, EBL
SW8260	PL-502-6D2	Tetrachloroethene	1.5	ug/L	U	EBL
SW8260	PL-504-6D2	Acetone	1.2	ug/L	U	TBL
SW8260	PL-505-6D2	Chloroform	0.21	ug/L	U	LBL
SW8260	PL-506-6D2	Acetone	1.1	ug/L	U	TBL
SW8260	PL-507-6D2	Hexachlorobutadiene	1	ug/L	UJ	LCSL, LCSDL

METHOD	NativeID	Analyte	Final Result	Units	Final Flag	Validation Reason
SW8260	PL-507-6D2	n-Butylbenzene	7.3	ug/L	J	LCSL, LCSDL
SW8260	PL-508-6D2	Acetone	1.9	ug/L	U	TBL
SW8260	PL-508-6D2	Chloroform	0.25	ug/L	U	LBL
SW8310	ASE-115A-6D2	Dibenzo(a,h)anthracene	0.1	ug/L	UJ	CCVL
SW8310	ASE-115A-6D2	Fluorene	0.31	ug/L	J	CFP
SW8310	ASE-116A-6D2	Dibenzo(a,h)anthracene	0.1	ug/L	UJ	CCVL
SW8310	ASE-116A-6D2	Fluorene	0.16	ug/L	J	CFP
SW8310	PL-502-6D2	Pyrene	0.11	ug/L	J	CFP

#### Notes:

CCVL = Continuing calibration recovery less than lower control limit.

CFP = Confirmation precision exceeded.

EBL = Equipment blank concentration less than the RL.

LBL = Laboratory blank concentration less than the RL.

TBL = Trip blank concentration less than the RL.

LCSL - LCS recovery less than lower limit.

LCSDL - LCS duplicate recovery less than lower limit.

LR = Linear range exceeded. Concentration above linear range.

MSL - Matrix spike recovery less than the lower limit.

MSDL - Matrix spike duplicate recovery less than the lower limit.

MSDP - Matrix spike duplicate RPD criteria exceedance.

# Attachment A

les Associated with DQE		
SampleID	Sample Type	Sample Date
PL-501-6D2	EB	12/07/2006
PL-502-6D2	FD	12/07/2006
PL-503-6D2	FD	12/08/2006
PL-504-6D2	FD	12/11/2006
PL-505-6D2	FD	12/14/2006
PL-506-6D2	FD	12/12/2006
PL-507-6D2	FD	12/15/2006
PL-508-6D2	FD	12/12/2006
ASE-100A-6D2	REG	12/08/2006
ASE-101A-6D2	REG	12/08/2006
ASE-102A-6D2	REG	12/08/2006
ASE-103A-6D2	REG	12/08/2006
ASE-105A-6D2	REG	12/08/2006
ASE-106A-6D2	REG	12/07/2006
ASE-107A-6D2	REG	12/07/2006
ASE-108A-6D2	REG	12/14/2006
ASE-109A-6D2	REG	12/07/2006
ASE-110A-6D2	REG	12/08/2006
ASE-111A-6D2	REG	12/13/2006
ASE-112A-6D2	REG	12/08/2006
ASE-113A-6D2	REG	12/07/2006
ASE-114A-6D2	REG	12/07/2006
ASE-115A-6D2	REG	12/13/2006
ASE-116A-6D2	REG	12/13/2006
ASE-122A-6D2	REG	12/07/2006
ASE-123A-6D2	REG	12/07/2006
ASE-124A-6D2	REG	12/07/2006
ASE-125A-6D2	REG	12/07/2006
ASE-126A-6D2	REG	12/08/2006
ASE-127A-6D2	REG	12/08/2006
ASE-128A-6D2	REG	12/07/2006
ASE-20A-6D2	REG	12/15/2006
ASE-37A-6D2	REG	12/12/2006
ASE-38A-6D2	REG	12/12/2006
ASE-39A-6D2	REG	12/12/2006
ASE-41A-6D2	REG	12/14/2006
ASE-46A-6D2	REG	12/11/2006
ASE-51A-6D2	REG	12/15/2006
ASE-52A-6D2	REG	12/15/2006
ASE-53A-6D2	REG	12/15/2006
ASE-54A-6D2	REG	12/11/2006

Samples Associated with DQE				
SampleID	Sample Type	Sample Date		
ASE-55A-6D2	REG	12/14/2006		
ASE-56A-6D2	REG	12/12/2006		
ASE-57A-6D2	REG	12/12/2006		
ASE-58A-6D2	REG	12/11/2006		
ASE-59A-6D2	REG	12/11/2006		
ASE-60A-6D2	REG	12/11/2006		
ASE-61A-6D2	REG	12/11/2006		
ASE-62A-6D2	REG	12/14/2006		
ASE-63A-6D2	REG	12/12/2006		
ASE-64A-6D2	REG	12/12/2006		
ASE-65A-6D2	REG	12/15/2006		
ASE-66A-6D2	REG	12/15/2006		
ASE-68A-6D2	REG	12/15/2006		
ASE-89A-6D2	REG	12/08/2006		
ASE-90A-6D2	REG	12/08/2006		
ASE-91A-6D2	REG	12/14/2006		
ASE-92A-6D2	REG	12/14/2006		
ASE-95A-6D2	REG	12/07/2006		
ASE-96A-6D2	REG	12/07/2006		
ASE-97A-6D2	REG	12/08/2006		
ASE-98A-6D2	REG	12/07/2006		
ASE-99A-6D2	REG	12/07/2006		
BC-7A-6D2	REG	12/08/2006		
BC-8B-6D2	REG	12/08/2006		
PL-101A-6D2	REG	12/12/2006		
PL-105A-6D2	REG	12/14/2006		
PL-201A-6D2	REG	12/11/2006		
PL-2101-6D2	REG	12/11/2006		
PL-2102-6D2	REG	12/11/2006		
TB-120606	ТВ	12/07/2006		
TB-120706	ТВ	12/08/2006		
TB121106	ТВ	12/11/2006		
TB-121206	ТВ	12/12/2006		
TB-121306	ТВ	12/13/2006		
TB-121406	ТВ	12/14/2006		
TB-121506	TB	12/15/2006		



December 22, 2006

Service Request No: D0602003

Shane Lowe CH2M Hill 2625 S. Plaza Drive Suite 300 Tempe, AZ 85282

RE: Sky Harbor/2959482

Dear Shane:

Enclosed are the results of the sample(s) submitted to our laboratory on December 8, 2006. For your reference, these analyses have been assigned our service request number D0602003.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 105. You may also contact me via email at MFesler@redding.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Mark Fesler

Project Chemist

CC: Terri Krauss

# **Current CAS Redding Accreditation Programs**

## Federal and National Programs

- U.S Air Force, Air Force Center for Environmental Excellence (AFCEE)

  Approved laboratory for Wastewater and Hazardous Waste
- U.S. Army Corps of Engineers MRD, HTRW Mandatory Center of Expertise Validated for Wastewater and Hazardous Waste
- Department of the Navy, Naval Facilities Engineering Service Center (NFESC)

  Approved laboratory for Wastewater and Hazardous Waste

## State and Local Programs

 State of Alaska, Department of Environmental Conservation Approved Laboratory for Contaminated Sites Lab ID UST-001

State of Arizona, Department of Health Services, Office of Laboratory Licensure
 Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste
 Lab ID AZ0604

• State of California, Department of Health Services, National Environmental Laboratory Accreditation Program (NELAP)

Approved Laboratory for Drinking Water, Wastewater and Hazardous Waste Lab ID 01105CA

Los Angeles County Sanitation District
 Approved Laboratory for Wastewater
 Lab ID 10243

• State of California, Department of Health Services, Environmental Laboratory Accreditation Program (ELAP)

Approved Laboratory for Microbiology of Drinking Water and Wastewater Lab ID 2635

• State of Florida, Department of Health, Bureau of Laboratories (NELAP)

Approved Environmental Testing Laboratory for Wastewater and Hazardous Waste Lab ID E87203

• State of Kansas, Department of Health and Environment (NELAP)

Approved Laboratory for Hazardous Waste Lab ID E-10323

State of Massachusetts, Department of Environmental Protection

Approved laboratory for Drinking Water and Wastewater Lab ID M-CA025

• State of Oklahoma, Department of Environmental Quality

Approved Laboratory for General Water Quality/Sludge Testing Lab ID 9952

• State of Oregon, Environmental Laboratory Accreditation Program (ORELAP)

Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste Lab ID CA200004

• State of Utah, Department of Health, Bureau of Laboratory Improvement (NELAP)

Approved Laboratory for Wastewater and Hazardous Waste Lab ID QUAL1

• State of Washington, Department of Ecology

Approved Laboratory for Wastewater and Hazardous Waste Lab ID C1234

• State of Wisconsin, Department of Natural Resources

Approved Laboratory for Wastewater and Hazardous Waste Lab ID 999767340

## Arizona Data Qualifiers

Revision 2.0, 11/26/2003

# Developed by the Sub-committee of the Arizona Environmental Laboratory Advisory Committee

## Microbiology:

- A1 = Too numerous to count.
- A2 = Sample incubation period exceeded method requirement.
- A3 = Sample incubation period was shorter than method requirement.
- A4 = Target organism detected in associated method blank.
- A5 = Incubator/water bath temperature was outside method requirements.
- A6 = Target organism not detected in associated positive control.
- A7 = Micro sample received without adequate headspace.

#### Method/calibration blank:

- B1 = Target analyte detected in method blank at or above the method reporting limit.
- B2 = Non-target analyte detected in method blank and sample, producing interference.
- B3 = Target analyte detected in calibration blank at or above the method reporting limit.
- B4 = Target analyte detected in blank at/above method acceptance criteria.
- B5 = Target analyte detected in method blank at or above the method reporting limit, but below trigger level or MCL.
- B6 = Target analyte detected in calibration blank at or above the method reporting limit, but below trigger level or MCL.
- B7 = Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above the concentration found in the method blank.

#### Confirmation:

- C1 = Confirmatory analysis not performed as required by the method.
- C3 = Qualitative confirmation performed.
- C4 = Confirmatory analysis was past holding time.
- C5 = Confirmatory analysis was past holding time. Original result not confirmed.
- C6 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the higher value was reported as there was no obvious chromatographic interference.
- C7 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic interference.

#### Dilution:

- D1 = Sample required dilution due to matrix.
- D2 = Sample required dilution due to high concentration of target analyte.
- D3 = Sample dilution required due to insufficient sample.
- D4 = Minimum reporting level (MRL) adjusted to reflect sample amount received and analyzed.

#### Estimated concentration:

- E1 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
- E2 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
- E3 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to holding time requirements.

# Arizona Data Qualifiers Revision 2.0, 11/26/2003

- E4 = Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL).
- E5 = Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL), but not confirmed by alternate analysis.
- E6 = Concentration estimated. Internal standard recoveries did not meet method acceptance criteria.
- E7 = Concentration estimated. Internal standard recoveries did not meet laboratory acceptance criteria.
- E8 = Analyte reported to MDL per project specification. Target analyte was not detected in the sample.

#### Hold time:

- H1 = Sample analysis performed past holding time.
- H2 = Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
- H3 = Sample was received and analyzed past holding time.
- H4 = Sample was extracted past required extraction holding time, but analyzed within analysis holding time.

#### BOD:

- K1 = The sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2 mg/L. Any reported result is an estimated value.
- K2 = The sample dilutions set up for the BOD analysis did not meet the criteria of a residual dissolved oxygen of at least 1 mg/L. Any reported result is an estimated value.
- K4 = The seed depletion was outside the method acceptance limits. The reported result is an estimated value.
- K5 = The dilution water D.O. depletion was > 0.2 mg/L.
- K6 = Glucose/glutamic acid BOD was below method acceptance criteria.
- K7 = A discrepancy between the BOD and COD results has been verified by reanalysis of the sample for COD.
- K8 = Glucose/glutamic acid BOD was above method acceptance levels.

# Laboratory fortified blank/blank spike:

- L1 = The associated blank spike recovery was above laboratory acceptance limits.
- L2 = The associated blank spike recovery was below laboratory acceptance limits.
- L3 = The associated blank spike recovery was above method acceptance limits.
- L4 = The associated blank spike recovery was below method acceptance limits.

#### Matrix spike:

- M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.
- M2 = Matrix spike recovery was low, the method control sample recovery was acceptable.
- M3 = The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
- M4 = The analysis of the spiked sample required a dilution such that the spike concentration was diluted below the reporting limit. The method control sample recovery was acceptable.
- M5 = Analyte concentration was determined by the method of standard addition (MSA).

## Arizona Data Qualifiers Revision 2.0, 11/26/2003

M6 = Matrix spike recovery was high. Data reported per ADEQ policy 0154.000.

M7 = Matrix spike recovery was low. Data reported per ADEQ policy 0154.000.

#### General:

N1 = See case narrative.

N2 = See corrective action report.

N3 = The analysis meets all method requirements. See case narrative.

## Sample quality:

- Q1 = Sample integrity was not maintained. See case narrative.
- Q2 = Sample received with headspace.
- Q3 = Sample received with improper chemical preservation.
- Q4 = Sample received and analyzed without chemical preservation.
- Q5 = Sample received with inadequate chemical preservation, but preserved by the laboratory.
- Q6 = Sample was received above recommended temperature.
- Q7 = Sample inadequately dechlorinated.
- Q8 = Insufficient sample received to meet method QC requirements. Batch QC requirements satisfies ADEQ policies 0154 and 0155.
- Q9 = Insufficient sample received to meet method QC requirements.
- Q10 = Sample received in inappropriate sample container.
- Q11 = Sample is heterogeneous. Sample homogeneity could not be readily achieved using routine laboratory practices.

#### Duplicates:

- R1 = RPD exceeded the method control limit. See case narrative.
- R2 = RPD exceeded the laboratory control limit. See case narrative.
- R4 = MS/MSD RPD exceeded the method control limit. Recovery met acceptance criteria.
- R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- R6 = LFB/LFBD RPD exceeded the method control limit. Recovery met acceptance criteria.
- R7 = LFB/LFBD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- R8 = Sample RPD exceeded the method control limit.
- R9 = Sample RPD exceeded the laboratory control limit.
- R10 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic problems.
- R11 = The RPD calculation for MS/MSD does not provide useful information due to the varying sample weights when Encore samplers/methanol field preserved samples are used.

#### Surrogate:

- S1 = Surrogate recovery was above laboratory acceptance limits, but within method acceptance limits
- S3 = Surrogate recovery was above laboratory acceptance limits, but within method acceptance limits. No target analytes were detected in the sample.
- S4 = Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.
- S5 = Surrogate recovery was below laboratory acceptance limits, but within method acceptance limits.
- S6 = Surrogate recovery was below laboratory and method acceptance limits. Reextraction and/or reanalysis confirms low recovery caused by matrix effect.

## Arizona Data Qualifiers Revision 2.0, 11/26/2003

- S7 = Surrogate recovery was below laboratory and method acceptance limits. Unable to confirm matrix effect.
- S8 = The analysis of the sample required a dilution such that the surrogate recovery calculation does not provide any useful information. The method control sample recovery was acceptable.
- S10 = Surrogate recovery was above laboratory and method acceptance limits. See Case narrative.
- S11 = Surrogate recovery was high. Data reported per ADEQ policy 0154.000.
- S12 = Surrogate recovery was low. Data reported per ADEQ policy 0154.000.

#### Method/analyte discrepancies:

- T1 = Method approved by EPA, but not yet licensed by ADHS.
- T2 = Cited ADHS licensed method does not contain this analyte as part of method compound list.
- T3 = Method not promulgated either by EPA or ADHS.
- T4 = Tentatively identified compound. Concentration is estimated and based on the closest internal standard.

#### Calibration verification:

- V1 = CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
- V2 = CCV recovery was above method acceptance limits. This target analyte was detected in the sample. The sample could not be reanalyzed due to insufficient sample.
- V3 = CCV recovery was above method acceptance limits. This target analyte was detected in the sample, but the sample was not reanalyzed. See case narrative.
- V4 = CCV recovery was below method acceptance limits. The sample could not be reanalyzed due to insufficient sample.
- V5 = CCV recovery after a group of samples was above acceptance limits. This target analyte was not detected in the sample. Acceptable per EPA Method 8000B.
- V6 = Data reported from one-point calibration criteria per ADEQ policy 0155.000.
- V7 = Calibration verification recovery was above the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
- V8 = Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.

#### Calibration:

- W1 = The % RSD for this compound was above 20%. The average % RSD for all compounds in the calibration met the 20% criteria as specified in EPA method 8000B.
- W2 = The % RSD for this compound was above 15%. The average % RSD for all compounds in the calibration met the 15% criteria as specified in EPA method 8260B/8270C.

Client:

**Project:** Sky Harbor/2959482

Service Request: D0602003

# SAMPLE CROSS-REFERENCE

SAMPLE#	CLIENT SAMPLE ID	DATE	<u>TIME</u>
D0602003-001	ASE-106A-6D2	12/07/06	08:20
D0602003-002	ASE-107A-6D2	12/07/06	02:43
D0602003-003	ASE-113A-6D2	12/07/06	01:57
D0602003-004	ASE-114A-6D2	12/07/06	03:45
D0602003-005	ASE-122A-6D2	12/07/06	08:55
D0602003-006	ASE-124A-6D2	12/07/06	05:59
D0602003-007	ASE-125A-6D2	12/07/06	00:00
D0602003-008	ASE-128A-6D2	12/07/06	04:27
D0602003-009	ASE-95A-6D2	12/07/06	06:42
D0602003-010	ASE-96A-6D2	12/07/06	01:18
D0602003-011	ASE-98A-6D2	12/07/06	06:40
D0602003-012	ASE-99A-6D2	12/07/06	05:08
D0602003-013	PL-501-6D2	12/06/06	22:18
D0602003-014	PL-502-6D2	12/07/06	09:05
D0602003-015	TB-120606	12/06/06	22:25
D0602003-016	ASE-109A-6D2	12/07/06	09:52
D0602003-017	ASE-123A-6D2	12/07/06	10:32

# **CASE NARRATIVE**

#### COLUMBIA ANALYTICAL SERVICES, INC.

Client:

Honeywell International, Incorporated

Date Received:

Service Request No.: D0602003

Project:

Sky Harbor Sample Matrix: Aqueous

12/08/06

#### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables.

## Sample Receipt

17 Aqueous samples were received for analysis at Columbia Analytical Services on 12/08/06.

No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4 degrees Celsius upon receipt at the laboratory.

#### TPH-Diesel/Motor Oil by EPA Method 8015B

No anomalies associated with the analysis of these samples were observed.

#### Volatile Organic Compounds by EPA Method 8260B

#### **Elevated Method Reporting Limits:**

Samples ASE-106-6D2, ASE95A-6D2 and ASE96A-6D2 required dilution due to the presence of elevated levels of target analytes. The reporting limits are adjusted to reflect the dilution.

### Polynuclear Aromatic Hydrocarbons by EPA Method 8310

No anomalies associated with the analysis of these samples were observed.

Marketter Date: 12/27/06

CHAIN	OF	CUSTODY	DOCUMEN	ITA	TION
		CUDIUDI			

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3725 E Atlanta Ave					Chain	OfC	Chain Of Custody / Analysis Request	Analy	vsis R	equest					Page 1 of 1
Phoenix, AZ 85040 Phone 602-437-0330		dunare ISS						,		I.					Lab Use Only Project No:
Client Contact: (name, co., address)	ıme, co., address)	Sampler: M: Wiese		R. Romanda	# 4. L-	Si	Site Name:	Sky	Sky Harbor AZ	ĄŻ					
Jennifer Holland	7	Project Nu	9	1460		Lc	Location of Site:		Phoenix, AZ						Job No.
CH2M HILL		Analysis Turi	Analysis Turnaround Time:										L	L	
2625 South Plaza Dr STE 300	za Dr STE 300	24 Hour -													
Tempe, AZ 85282	32	7 Day -													
480-377-6287		14 Day -				pas	a as								
		21 Day - 28 Day -				iJ noil	ydwes W/SI	0	01		-				
Samı	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Cont. Preserva	Use for A Filtered ! Unfiltere	SW826	2M83						
Location ID	Field Sample ID				20000			200000							Lab Sample Numbers
1 ASE-106A	ASE-106A-6D2	Dec 7 2006	0820	GW	WATER	2	×	×							
	ASE-107A-6D2	Dec 7 2006		GW	WATER		×	×			_	_			
П	-ASE-410A-6D2	Dec 7 2006	September 1	MS-independent	WATER	2X	¥	<b>XX</b>	THE PROPERTY OF THE	Acceptance of the company of the com	They are a second or a second	ображения развияваются прическа	MANAGEMENT OF THE PROPERTY OF	пуддеского вирходускими вен	
	ASE-113A-6D2	Dec \$ 2006	0157	GW	WATER	5 X		×							
ASE-114A	ASE-114A-6D2	Dec 7 2006	~1	GW	WATER			×	+	+	_				
4-6 ASE-122A	ASE-122A-6D2	Dec 7 2006		GW	WATER	Ī		×	×		1	+	$\frac{1}{2}$	1	· · · · · · · · · · · · · · · · · · ·
	ASE-124A-6D2 ASE-125A-6D2	Dec 7 2006	0000	M M	WATER	× ×	<b>\</b>	× ×	× ,	+	+	-	1	+	
ASE-128A	ASE-128A-6D2	Dec 7 2006	1	3	WATER	T	ŀ	4	,	+	+	+			
	ASE-95A-6D2	Dec 7 2006		GW	WATER	T		×					_	_	
	ASE-96A-6D2	Dec 7 2006	L	GW	WATER	Г	×	×							
	ASE-98A-6D2	Dec 7 2006	OCA	ВW	WATER	5 X		×							
ASE-99A	ASE-99A-6D2	Dec 7 2006	050R	ΒM	WATER		×	×							
EQUIPBLANK	PL-501-6D2	$\overline{}$	2218	BLKWATER WATER	WATER	3 ×		×							
FIELDOC	PL-502-6D2		2060	ΜĐ	WATER	7 X		×	×						
Trip Blank	9090	2006	7275	BLKWATER WATER	WATER	×		-							
3	ASC 103A-		Ĭ.	3	3	X V	X	X	+	+	1				
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23															
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						444	10				7	XX			



5090 Caterpillar Road Redding, CA 96003 Phone: (530) 244-5262

	COOLER RECEIPT FORM	
Proje	ct/Client: Hollie L	Batch No.
1.	Cooler(s)/Sample(s) received on: 1880	Shipped via: UPS
	Shipping Bill # (s): WWW.S	# of Coolers/Packages
2.	Radiological Screening by:	_ Acceptable Rejected
3.	Custody seals on outside of cooler:  If yes, where? Front Rear Lt Side Rt Side	YES NO N/A
	Seals intact:	YES NO
	CQOLER/SAMPLE PROCESSA	ING
4.	Sample Processing/Tagging by:	ucl
5.	Sample Processing/Tagging by:  Cooler(s)/Sample(s) Temp's:  (or)  Temp. Blank (if included):	3°C 3°C
6.	Type of packing material (circle): Ice Blue Ice Bubble Wrap Bub	oble Bags Zip Locks Webbing
	Other:	
7.	Custody papers properly filled out (ink, signed, dated, released, etc.)?	YES NO
8.	Containers arrived in good condition (not broken, leaking, etc.)?	YES NO
9.	Samples received with adequate holding time remaining to conduct analysis	is? YES NO
10.	Container labels complete (i.e. analysis, preservation, date/time, etc.)?	YES NO
11.	Container labels and tags agree with custody papers?	YES NO
12.	Correct types of containers used for the tests indicated?	YES NO
	a.) Adequate sample received? If not, note on Exception Report	YES NO
13.	Containers supplied by:	CAS Other
14.	Preserved containers received with the appropriate preservative?  pH: VOAS © < Z pr DOC (or) See pH log.	YES NO N/A
15.	VOA vials free of air bubbles?	YES NO N/A
16.	Trip Blank preparation date: 12/10/06	CAS Other N/A
17.	Volatile Soil samples: Encores or Plugs in Vials	
	Freezer or GC/MS Date	e:Time:N/A

See Exception Report for discrepancies.

Rev. 8/18/2004/ds

# TPH - Diesel and Motor Oil

Client: Project:

Honeywell International, Incorporated Sky Harbor/2959482

Service Request:

D0602003

Cover Page - Organic Analysis Data Package TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name	Lab Code	Date Collected	Date Received
ASE-106A-6D2	D0602003-001	12/07/2006	12/08/2006
ASE-107A-6D2	D0602003-002	12/07/2006	12/08/2006
ASE-113A-6D2	D0602003-003	12/07/2006	12/08/2006
ASE-114A-6D2	D0602003-004	12/07/2006	12/08/2006
ASE-122A-6D2	D0602003-005	12/07/2006	12/08/2006
ASE-124A-6D2	D0602003-006	12/07/2006	12/08/2006
ASE-125A-6D2	D0602003-007	12/07/2006	12/08/2006
ASE-128A-6D2	D0602003-008	12/07/2006	12/08/2006
ASE-95A-6D2	D0602003-009	12/07/2006	12/08/2006
ASE-96A-6D2	D0602003-010	12/07/2006	12/08/2006
ASE-98A-6D2	D0602003-011	12/07/2006	12/08/2006
ASE-99A-6D2	D0602003-012	12/07/2006	12/08/2006
PL-502-6D2	D0602003-014	12/07/2006	12/08/2006
ASE-109A-6D2	D0602003-016	12/07/2006	12/08/2006
ASE-123A-6D2	D0602003-017	12/07/2006	12/08/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:	Wida Ang	Name: WIDA ANG
Date:	4/20/06	Title: Organic Manager
Date:	120 100	Title: Organic Francia

RR13316

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602003

Date Collected: 12/07/2006

**Date Received:** 12/08/2006

# TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-106A-6D2

Lab Code:

D0602003-001

Units: ug/L Basis: NA

**Extraction Method:** 

Level: Low

**Analysis Method:** 

EPA 3510C 8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	31 J	480	20	1	12/12/06	12/19/06	E4
C22 - C32 HRO (TPH-Motor Oil)	<b>62</b> J	480	30	1	12/12/06	12/19/06	E4

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	103	26-152	12/19/06		
Tricontane	101	40-140	12/19/06		

Comments:

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Form 1A - Organic

SuperSet Reference: RR13316

1 of 1

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602003

**Date Collected:** 12/07/2006

**Date Received:** 12/08/2006

# TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-107A-6D2

Lab Code:

D0602003-002

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note	
C10 - C22 DRO (TPH-Diesel)	240 J	500	20	1	12/12/06	12/19/06		
C22 - C32 HRO (TPH-Motor Oil)	<b>38</b> J	500	30	1	12/12/06	12/19/06	E4	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
Octacosane	99	26-152	12/19/06			
Tricontane	98	40-140	12/19/06			

Comments:

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SuperSet Reference: RR13316

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Analytical Results

Client:

Honeywell International, Incorporated

Project: Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602003

**Date Collected:** 12/07/2006

**Date Received:** 12/08/2006

### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-113A-6D2

Lab Code:

D0602003-003

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C.

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	ND U	490	20	1	12/12/06	12/19/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	490	30	1	12/12/06	12/19/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	93	26-152	12/19/06		
Tricontane	92	40-140	12/19/06		

Comments:

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Form 1A - Organic

1 of 1

RR13316 SuperSet Reference:

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602003

**Date Collected:** 12/07/2006

**Date Received:** 12/08/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-114A-6D2

Lab Code:

D0602003-004

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

Dilution Date Date

Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	<b>21</b> J	500	20	1	12/12/06	12/19/06	E4
C22 - C32 HRO (TPH-Motor Oil)	41 J	500	30	1	12/12/06	12/19/06	E4

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	88	26-152	12/19/06		
Tricontane	86	40-140	12/19/06		

Comments:

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Form 1A - Organic

1 of

SuperSet Reference: RR13316

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

**Date Collected:** 12/07/2006

Service Request: D0602003

Sample Matrix:

Ground water

**Date Received:** 12/08/2006

# TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-122A-6D2

Units: ug/L

Lab Code:

D0602003-005

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	ND U	480	20	1	12/12/06	12/19/06	
C22 - C32 HRO (TPH-Motor Oil)	<b>32</b> J	480	30	1	12/12/06	12/19/06	E4

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
Octacosane	99	26-152	12/19/06			
Tricontane	98	40-140	12/19/06			

Comments:

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Form 1A - Organic

1 of

SuperSet Reference: RR13316

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Service Request: D0602003

Date Collected: 12/07/2006

Sample Matrix:

Ground water

**Date Received:** 12/08/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-124A-6D2

Lab Code:

Units: ug/L

D0602003-006

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	ND U	500	20	1	12/12/06	12/19/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	500	30	1	12/12/06	12/19/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
_				Note	
ctacosane	103	26-152	12/19/06		
Tricontane	101	40-140	12/19/06		

Comments:

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Page 1 of 1

RR13316

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602003

Date Collected: 12/07/2006

**Date Received:** 12/08/2006

# TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-125A-6D2

Lab Code:

D0602003-007

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel) C22 - C32 HRO (TPH-Motor Oil)	ND U ND U	490 490	20 30	1	12/12/06 12/12/06	12/20/06 12/20/06	
C22 - C32 HRO (TPH-MOIOFOII)	ND U	490	30	1	12/12/00	12/20/00	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
Octacosane	89	26-152	12/20/06			
Tricontane	88	40-140	12/20/06			

Comments:

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Form 1A - Organic

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SuperSet Reference: RR13316

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Analytical Results

Client:

Honeywell International, Incorporated

Project: Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602003

Date Collected: 12/07/2006

**Date Received:** 12/08/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-128A-6D2

Lab Code:

D0602003-008

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	<b>20</b> J	490	20	1	12/12/06	12/20/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	490	30	1	12/12/06	12/20/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	102	26-152	12/20/06		
Tricontane	100	40-140	12/20/06		

Comments:

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Form 1A - Organic

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RR13316

SuperSet Reference:

1 of 1

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix: Ground water

Service Request: D0602003

Date Collected: 12/07/2006

**Date Received:** 12/08/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-95A-6D2

Lab Code:

D0602003-009

Units: ug/L Basis: NA

Extraction Method:

EPA 3510C

Level: Low

Analysis Method:

8015B

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	59 J	490	20	1	12/12/06	12/20/06	E4
C22 - C32 HRO (TPH-Motor Oil)	<b>39</b> J	490	30	1	12/12/06	12/20/06	E4

		Control	Date		
Surrogate Name	%Rec	Limits	Analyzed	Note	
Octacosane	96	26-152	12/20/06		
Tricontane	94	40-140	12/20/06		

Comments:

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Form 1A - Organic

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SuperSet Reference: RR13316

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Analytical Results

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Service Request: D0602003 **Date Collected:** 12/07/2006

Sample Matrix:

Ground water

**Date Received:** 12/08/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-96A-6D2

Lab Code:

D0602003-010

Units: ug/L

Basis: NA

Extraction Method:

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed Not	te
C10 - C22 DRO (TPH-Diesel)	<b>30</b> J	490	20	1 .	12/12/06	12/20/06 E4	
C22 - C32 HRO (TPH-Motor Oil)	<b>55</b> J	490	30	1	12/12/06	12/20/06 E4	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	98	26-152	12/20/06		
Tricontane	97	40-140	12/20/06		

Comments:

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Form 1A - Organic

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Merged

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602003

Date Collected: 12/07/2006

**Date Received:** 12/08/2006

# TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-98A-6D2

Lab Code:

D0602003-011

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	ND U	490	20	1	12/12/06	12/20/06	
C22 - C32 HRO (TPH-Motor Oil)	<b>36</b> J	490	30	1	12/12/06	12/20/06	E4

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	98	26-152	12/20/06		
Tricontane	96	40-140	12/20/06		

Comments:

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Form 1A - Organic

Page 1 of 1

Analytical Results

Client:

Honeywell International, Incorporated

Sample Matrix:

Sky Harbor/2959482

**Date Collected:** 12/07/2006

Service Request: D0602003

**Project:** 

Ground water

**Date Received:** 12/08/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-99A-6D2

Lab Code:

Units: ug/L

D0602003-012

Basis: NA

Extraction Method: EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	ND U	490	20	1	12/12/06	12/20/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	490	30	1	12/12/06	12/20/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
Octacosane	105	26-152	12/20/06			
Tricontane	103	40-140	12/20/06			

Comments:

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Form 1A - Organic

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SuperSet Reference: RR13316

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602003

**Date Collected:** 12/07/2006

**Date Received:** 12/08/2006

## TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

PL-502-6D2

Lab Code:

D0602003-014

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	ND U	480	20	1	12/12/06	12/20/06	
C22 - C32 HRO (TPH-Motor Oil)	34 Ј	480	30	1	12/12/06	12/20/06	E4

A Company of the Comp					
Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	95	26-152	12/20/06		
Tricontane	93	40-140	12/20/06		

Comments:

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SuperSet Reference:

RR13316

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602003

**Date Collected:** 12/07/2006

**Date Received:** 12/08/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-109A-6D2

Lab Code:

D0602003-016

Units: ug/L

Basis: NA

Extraction Method:

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	ND U	480	20	1	12/12/06	12/20/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/12/06	12/20/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	·
Octacosane	88	26-152	12/20/06		
Tricontane	87	40-140	12/20/06		

Comments:

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Form 1A - Organic

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SuperSet Reference: RR13316

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Analytical Results

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602003

Date Collected: 12/07/2006

**Date Received:** 12/08/2006

# TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-123A-6D2

Lab Code:

D0602003-017

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis	Method:	

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	ND U	480	20	1	12/12/06	12/20/06	
C22 - C32 HRO (TPH-Motor Oil)	<b>39</b> J	480	30	1	12/12/06	12/20/06	E4

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	87	26-152	12/20/06		
Tricontane	85	40-140	12/20/06		

Comments:

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Form 1A - Organic

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SuperSet Reference:

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Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602003

Date Collected: NA

Date Received: NA

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

Method Blank

Lab Code:

DWG0601047-3

Units: ug/L

Basis: NA

Extraction Method: EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note	
C10 - C22 DRO (TPH-Diesel)	ND U	500	20	. 1	12/12/06	12/19/06		
C22 - C32 HRO (TPH-Motor Oil)	ND U	500	30	1	12/12/06	12/19/06		

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
cosane	67	26-152	12/19/06	
Tricontane	66	40-140	12/19/06	

Comments:

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SuperSet Reference: RR13316

QA/QC Report

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602003

**Surrogate Recovery Summary** 

TPH-Diesel / Motor Oil Range Organics by SW8015B

**Extraction Method: Analysis Method:** 

EPA 3510C

8015B

Units: PERCENT

Level: Low

Sample Name	Lab Code	Sur1	Sur2
Daniple I value	<u> </u>	<u> </u>	<u> </u>
ASE-106A-6D2	D0602003-001	103	101
ASE-107A-6D2	D0602003-002	99	98
ASE-113A-6D2	D0602003-003	93	92
ASE-114A-6D2	D0602003-004	88	86
ASE-122A-6D2	D0602003-005	99	98
ASE-124A-6D2	D0602003-006	103	101
ASE-125A-6D2	D0602003-007	89	88
ASE-128A-6D2	D0602003-008	102	100
ASE-95A-6D2	D0602003-009	96	94
ASE-96A-6D2	D0602003-010	98	97
ASE-98A-6D2	D0602003-011	98	96
ASE-99A-6D2	D0602003-012	105	103
PL-502-6D2	D0602003-014	95	93
ASE-109A-6D2	D0602003-016	88	87
ASE-123A-6D2	D0602003-017	87	85
Method Blank	DWG0601047-3	67	66
Lab Control Sample	DWG0601047-1	130	128
Duplicate Lab Control Sample	DWG0601047-2	113	111

#### Surrogate Recovery Control Limits (%)

Sur1 =	Octacosane	
Sur2 =	Tricontane	

Results flagged with an asterisk (\*) indicate values outside control criteria. Results flagged with a pound (#) indicate the control criteria is not applicable.

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Form 2A - Organic

26-152 40-140

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SuperSet Reference: RR13316

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QA/QC Report

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602003

**Date Extracted:** 12/12/2006

**Date Analyzed:** 12/19/2006

Lab Control Spike/Duplicate Lab Control Spike Summary TPH-Diesel / Motor Oil Range Organics by SW8015B

**Extraction Method:** 

EPA 3510C

**Analysis Method:** 

8015B

Units: ug/L

Basis: NA

Extraction Lot: DWG0601047

Level: Low

Lab Control Sample

DWG0601047-1

Duplicate Lab Control Sample

DWG0601047-2

Lab Control Spike **Duplicate Lab Control Spike** RPD %Rec Limits **RPD** Limit %Rec Expected %Rec **Analyte Name** Result **Expected** Result C10 - C22 DRO (TPH-Diesel) 1910 2180 2500 87 2500 76 61-143 13 30 C22 - C32 HRO (TPH-Motor Oil) 2530 2500 101 2210 2500 88 60-120 13 30

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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SuperSet Reference: RR13316

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# Volatile Organics By GC/MS

### ORGANIC ANALYSES DATA PACKAGE

Analytical N	Method: SW8260	AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical Services/Redding		
Base/Comm	and: ARIZONA DELIVERABLES	
Project:	Sky Harbor	
	Field Sample ID	Lab Sample 1D
	ASE-106A-6D2	D0602003-001
	ASE-107A-6D2	D0602003-002
	ASE-113A-6D2	D0602003-003
	ASE-114A-6D2	D0602003-004
	ASE-122A-6D2	D0602003-005
	ASE-124A-6D2	D0602003-006
	ASE-125A-6D2	D0602003-007
	ASE-128A-6D2	D0602003-008
	ASE-95A-6D2	D0602003-009
	ASE-96A-6D2	D0602003-010
	ASE-98A-6D2	D0602003-011
	ASE-99A-6D2	D0602003-012
	PL-501-6D2	D0602003-013
	PL-502-6D2	D0602003-014
	TB-120606	D0602003-015
	ASE-109A-6D2	D0602003-016
	ASE-123A-6D2	D0602003-017
Comments:		
comments.		
completene and in the c		conditions of the contract, both technically and for clease of the data contained in this hardcopy data package een authorized by the Laboratory Manager or the
Signature:	<u>B</u> Name:	BriAN Moore
Date:	7377 Name: 12/14/06 Title:	Technicac MANAger

RDD-061214:BM:BS-1449PST-SR:D0602003-D0602003-V

Analytical Method: SW8260	AAB #:	D0602003
Lab Name: Columbia Analytical Ser	vices/Redding	
Field Sample ID: ASE-106A-6D2	Lab Sample ID: D0602003-001 Matrix:	Water
% Solids:	Initial Calibration ID:	_12/05/06MSM
Date Received: 12/08/06	Date Extracted: Date Analyzed:	/11/06
Concentration Units (ug/L or ug/Kg dr	weight): UG/L Sample Volume: 5 000 M	MT.

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	0.46	1		E4
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	0.68	1		E4
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.29	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	250	1		
1,1-Dichloroethane	0.12	2.0	0.87	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.42	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	0.36	1		E4
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.37	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-106A-6D2 Lab Sample ID:	D0602003-001 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/08/06 Date Extracted:	Date Analyzed: _12/11/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume: _5.000 ML_

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.91	1 .		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	ND	1 .		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	. 1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Surrogate Recoveries are reported in Appendix O-A
Comments:

Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260							AAB #:D	0602003	-
Lab Name:	Columbia Analyt	ical Services/	Redding	3						
Field Sample	ID: ASE-106A	-6D2		Lab Sa	ample ID: I	00602	003-001	Matrix: V	Vater	
% Solids:							Initial Calib			SM
	d: 12/08/06	Dat	e Extrac	ted:			Date Anal	yzed: 12/1	1/06	
	n Units (ug/L or ug									
	Analyte		MI	DL	RL	C	oncentration	Dilution	Confirm	Qualifier
		-	-			+				
·						+				
			1			+				
						+	***************************************			
						_				
							***************************************			-
						+				
	Sur	rrogate		F	Recovery	T.	Control Limits	Ona	lifier	
	4-Bromofluorob				100		82-124			
	Dibromofluoron				100		84-127			
	Toluene-d8 - SS	S			100	+-	80-117			
				<u> </u>		<u> </u>				
			Interna	al Stan	dard		Qualifier			
		Fluorobenz						4		
		Chlorobenz 1,4-Dichlor						-		
		1,4-Dicilio	TOUCHZEI	10-44			L,			
Comments:							Surrogate Recove Internal Stand			
									1	

Analytical Method: SW8260		AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical Service	s/Redding	
Field Sample ID: ASE-106A-6D2DL	Lab Sample ID: D0602003-00	1DL Matrix: Water
% Solids:	Initia	al Calibration ID: 12/05/06MSM
Date Received: 12/08/06	rate Extracted: Da	te Analyzed: 12/11/06
Concentration Units (ug/L or ug/Kg dry w	eight): <u>UG/L</u> Sample Vo	lume:5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	3.6	50	ND	10		D2
Chloromethane	2.3	50	ND	10		D2
Vinyl chloride	2.2	10	ND	10		D2
Bromomethane	2.7	10	ND	10		D2
Chloroethane	2.0	50	ND	10		D2
Trichlorofluoromethane	1.4	50	ND	10		D2
1,1-Dichloroethene	1.9	20	ND	10		D2
Acetone	10	200	ND	10		D2
Carbon disulfide	1.1	50	ND	10		D2
Methylene chloride	1.5	50	ND	10		D2
Iodomethane	2.0	100	ND	10		D2
trans-1,2-Dichloroethene	1.6	20	ND	10		D2
Tert-butylmethylether	1.7	10	370	- 10		D2
1,1-Dichloroethane	1.2	20	ND	10		D2
Vinyl acetate	8.4	250	ND	10		D2
2,2-Dichloropropane	3.3	20	ND	10		D2
cis-1,2-Dichloroethene	1.7	20	ND	10		D2
2-Butanone	9.0	100	ND	10		D2
Bromochloromethane	2.5	50	ND	10		D2
Chloroform	1.4	20	ND	10		D2
1,1,1-Trichloroethane	1.4	20	ND	10		D2
1,1-Dichloropropene	1.8	20	ND	10		D2
Carbon tetrachloride	1.8	20	ND	10		D2
Benzene	1.2	10	ND	10		D2
1,2-Dichloroethane	1.8	10	ND	10		D2
Trichloroethene	1.0	10	ND	10		D2
1,2-Dichloropropane	1.7	20	ND	10		D2
Dibromomethane	1.8	20	ND	10		D2
Bromodichloromethane	1.7	10	ND	10		D2
cis-1,3-Dichloropropene	1.3	20	ND	10		D2
4-methyl-2-pentanone	8.5	100	ND	10		D2
Toluene	1.4	20	ND	10		D2
trans-1,3-Dichloropropene	1.9	20	ND	10		D2

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260		AAB #:_ D0602003
Lab Name: Columbia Analytical Serv	vices/Redding	
Field Sample ID: ASE-106A-6D2DL	Lab Sample ID: D06020	003-001DL Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/08/06	Date Extracted:	Date Analyzed: 12/11/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sam	ple Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	2.2	10	ND	10		D2
Tetrachloroethene	2.2	10	ND	10		D2
1,3-Dichloropropane	1.1	20	ND	10	Ò	D2
2-Hexanone	5.8	100	ND	10		D2
Dibromochloromethane	1.5	20	ND	10		D2
1,2-Dibromoethane	1.5	20	ND	10		D2
Chlorobenzene	1.5	10	ND	10		D2
1,1,1,2-Tetrachloroethane	2.3	50	ND	10		D2
Ethylbenzene	1.5	20	ND	10		D2
Xylene (total)	1.4	100	ND	10	·	D2
Styrene	1.6	20	ND	10		D2
Bromoform	1.8	50	ND	10		D2
Isopropylbenzene	1.7	20	ND	10		D2
1,1,2,2-Tetrachloroethane	1.7	- 10	ND	10		D2
Bromobenzene	1.7	50	ND	10		D2
1,2,3-Trichloropropane	2.0	100	ND	10		D2
n-Propylbenzene	1.3	20	ND	10		D2
2-Chlorotoluene	1.6	50	ND	10		D2
1,3,5-Trimethylbenzene	1.5	20	ND	10		D2
4-Chlorotoluene	1.6	50	ND	10		D2
tert-Butylbenzene	1.8	50	ND	10		D2
1,2,4-Trimethylbenzene	1.3	20	ND	10		D2
sec-Butylbenzene	1.7	50	ND	10		D2
1,3-Dichlorobenzene	1.1	10	ND	10		D2
p-Isopropyltoluene	1.0	20	ND	10		D2
1,4-Dichlorobenzene	1.1	10	ND	10		D2
n-Butylbenzene	3.3	50	ND	10		D2
1,2-Dichlorobenzene	1.4	10	ND	10		D2
1,2-Dibromo-3-chloropropane	8.1	50	ND	10		D2
1,2,4-Trichlorobenzene	3.6	50	ND	10		D2
Hexachlorobutadiene	6.0	10	ND	10		D2
Naphthalene	2.9	20	ND	10		D2
1,2,3-Trichlorobenzene	3.7	50	ND	10		D2

Comments:	s	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
	•	

Analytical M	al Method: SW8260 AAB #:_ D0602003								
Lab Name:	Columbia Analyti	ical Services/Redding	<u>g</u>						
Field Sample	ID: ASE-106A-	-6D2DL	Lab S	ample ID:	D0602	003-001DL	Matrix: _V	Vater	
% Solids:						Initial Calib	ration ID:	12/05/06M	SM
Date Receive	d: 12/08/06	Date Extra	cted: _			Date Anal	yzed: 12/1	1/06	
Concentration	n Units (ug/L or ug	z/Kg dry weight): _	UG/L		San	nple Volume:	5.000 M	<u>L</u>	
	Analyte	М	DL	RL	C	oncentration	Dilution	Confirm	Qualif
				<u> </u>					
	-								-
			<del></del>						
	***					T 171 200 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
		·			_				
				<u> </u>					
	Sur	rogate	1	Recovery		Control Limit	S Qua	lifier	
	4-Bromofluorob			102		82-124			
	Dibromofluoron		ļ	101	_	84-127			
	Toluene-d8 - SS	-	<del> </del>	100		80-117			
	L								
		Intern	al Stan	dard		Qualifier	_		
		Fluorobenzene				<u> </u>	_		
		1,4-Dichlorobenze	Chlorobenzene-d5				$\dashv$		
		1,4-Dichioroccize	nc-u-			<u> </u>			
						G D			
Comments:						Surrogate Recove Internal Standa			
								***************************************	
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Analytical Method: SW8260		AAB #:_ D0602003
Lab Name: Columbia Analytical Ser	vices/Redding	
Field Sample ID: ASE-107A-6D2	Lab Sample ID: I	00602003-002 Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/08/06	Date Extracted:	Date Analyzed: 12/11/06
Concentration Units (ug/L or ug/Kg dry	y weight): UG/L	Sample Volume:5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1	·	
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.56	1		E4
Acetone	1.0	20	1.1	1		E4
Carbon disulfide	0.11	5.0	ND	.1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	14	1 .		
1,1-Dichloroethane	0.12	2.0	0.58	1		E4
Vinyl acetate	0.84	25	ND	1	-	
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.22	· 1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1	-	
Benzene	0.12	1.0	15	1		
1,2-Dichloroethane	0.18	1.0	ND	1	-	
Trichloroethene	0.10	1.0	0.47	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:		Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Analytical Method: SW8260		AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical Serv	vices/Redding	
Field Sample ID: ASE-107A-6D2	Lab Sample ID: D06020	003-002 Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/08/06	Date Extracted:	Date Analyzed: 12/11/06
Concentration Units (ug/L or ug/Kg dry	weight): <u>UG/L</u> Sam	ple Volume: _5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	1.2	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	2.9	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	2.7	1		
Xylene (total)	0.14	10	2.3	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	7.0	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	4.9	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1	, i	
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.36	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	2.0	1		
sec-Butylbenzene	0.17	5.0	4.4	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.84	1		E4
1,4-Dichlorobenzene	0.11	1.0	0.44	1		E4
n-Butylbenzene	0.33	5.0	1.6	11		E4
1,2-Dichlorobenzene	0.14	1.0	0.18	1		E4
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	11		
Naphthalene	0.29	2.0	13	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260	BARASINI SANARANIA SANARANIA						AAB #:_ D	0602003	
Lab Name:	Columbia Analyt	ical Services/I	Redding							
Field Sample	ID: ASE-107A	-6D2		Lab Sa	mple ID:	D0602	2003-002	Matrix: _V	Vater	
% Solids:	-						Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	ed: 12/08/06	Date	e Extrac	ted:			Date Anal	yzed: 12/1	1/06	
	n Units (ug/L or ug						nple Volume:			
	Analyte		MI	)L	RL		Concentration	Dilution	Confirm	Qualifier
			-							
						-				
	MARKET CONTRACTOR OF THE PARTY									·
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	Sur	rogate		R	ecovery		Control Limit	s Qua	lifier	
	4-Bromofluorob	enzene - SS			99		82-124			
	Dibromofluoron				99		84-127			
	Toluene-d8 - SS	) 	<del></del>		98		80-117			
			Interna	l Stan	dard		Qualifier			
		Fluorobenze	ene							
		Chlorobenz					<u> </u>	4		
		1,4-Dichlor	obenzen	ie-d4			<u> </u>			
							Surrogate Recove			
Comments:							Internal Stand	ards are repor	ted in Append	ix O-C

Analytical Method: SW8260	·.	AAB #:
Lab Name: Columbia Analytical Serv	rices/Redding	
Field Sample ID: ASE-113A-6D2	Lab Sample ID: D	00602003-003 Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: _12/08/06	Date Extracted:	Date Analyzed: 12/11/06
Concentration Units (ug/L or ug/Kg dry	weight): <u>UG/L</u>	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.81	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	0.20	.1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.27	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.58	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1 .		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1 .		
Toluene	0.14	2.0	0.16	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	· .		AAB #: <u>D0602003</u>	
Lab Name: Columbia Analytical Serv	rices/Redding			
Field Sample ID: ASE-113A-6D2	Lab Sample ID:	D0602003-003	Matrix: Water	
% Solids:		Initial Calibr	ration ID: <u>12/05/06MSM</u>	
Date Received: 12/08/06	Date Extracted:	Date Analy	yzed: <u>12/11/06</u>	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	1.8	1		***************************************
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.27	1	·	E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		-
1,2,3-Trichloropropane	0.20	10	ND	. 1		
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		1.
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	0.13	1		E4
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1	-	

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C

Analytical Method	d: <u>SW8260</u>		-					AAB #: <u>_</u>	00602003	
Lab Name: Colu	umbia Analyti	cal Services/	Redding	<u> </u>						
Field Sample ID:	ASE-113A-	6D2		Lab Sa	mple I <u>D:</u>	0602	003-003	Matrix: _\_	Water	
% Solids:							Initial Calib	ration ID:	12/05/06M	SM
Date Received: _1	12/08/06	Dat	e Extrac	ted: _			_ Date Anal	yzed: <u>12/1</u>	1/06	·
Concentration Un	its (ug/L or ug	/Kg dry weig	ght): <u> </u>	JG/L	·	San	iple Volume:	5.000 M	<u>L</u>	
	Analyte		MI	)L	RL	C	oncentration	Dilution	Confirm	Qualifier
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4-1	Sur Bromofluorob	rogate		ŀ	Recovery 99	+	Control Limits 82-124	s Qua	alifier	
	bromofluoron				98		84-127			
To	oluene-d8 - SS				99		80-117			
						<u> </u>		İ		
			Interna	l Stan	dard	······································	Qualifier			
		Fluorobenz								
		Chlorobenz 1,4-Dichlor								
		1,4-Diction	Obelizei	1C-U4		-	AN EMARKOON ET DE LONG HEIDEN MAN DE LONG HEIDEN MA			
							Surrogate Recove	arias ara rara	rtad in Annoved	iv O. 1
Comments:							Internal Stand			
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Analytical Method: SW8260	AAB #: <u>D0602003</u>	_
Lab Name: Columbia Analytical Serv	ices/Redding	
Field Sample ID: ASE-114A-6D2	Lab Sample ID: D0602003-004 Matrix: Water	
% Solids:	Initial Calibration ID: 12/05/06MSM	
Date Received: 12/08/06	Date Extracted: Date Analyzed: 12/11/06	
Concentration Units (ug/L, or ug/Kg dry	weight): UG/L Sample Volume: 5 000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.93	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	0.23	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	. 1		
Chloroform	0.14	2.0	0.33	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.72	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.16	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:		Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Serv	ices/Redding
Field Sample ID: ASE-114A-6D2	Lab Sample ID: D0602003-004 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/08/06	Date Extracted: Date Analyzed: _12/11/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	2.0	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.17	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		-
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	0.25	1		E4
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	0.28	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	0.36	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	0.52	1		E4
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260						AAB#: D	0602003	
Lab Name:	Columbia Analyti	ical Services/Redding							
Field Sample	ID: ASE-114A-	-6D2	Lab Sa	ample ID: D	0602	003-004	Matrix: _V	Vater	
% Solids:						Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: 12/08/06	Date Extrac	ted:			Date Anal	yzed: 12/1	1/06	
		g/Kg dry weight):							and the second s
Concentration	TOMES (ug/L) of ug	y Kg dry weight).		·	Jan			<u> </u>	····
	Analyte	MI	DL	RL	C	oncentration	Dilution	Confirm	Quali
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	4-Bromofluorob	rogate	1	Recovery 98	+-	Control Limits 82-124	s Qua	lifier	
	Dibromofluoron		<u> </u>	98	<del> </del>	84-127			
	Toluene-d8 - SS			99		80-117			
				.,,					
		Interna	al Stan	dard		Qualifier	7		
		Fluorobenzene	ai Stan	luaru		Quantier			
		Chlorobenzene-d5							
		1,4-Dichlorobenzer	ne-d4		····				
						. 28			
						Surrogate Recove			
Comments:						Internal Stand	ards are repor	ted in Append	ix O-C
									,

Analytical Method: SW8260		AAB#	:D0602003
Lab Name: Columbia Analytical Serv	rices/Redding		
Field Sample ID: ASE-122A-6D2	Lab Sample ID:	D0602003-005 Matrix	: Water
% Solids:		Initial Calibration I	D: _12/05/06MSM
Date Received: 12/08/06	Date Extracted:	Date Analyzed:	12/11/06
Concentration Units (ug/L or ug/Kg dry	weight): IIG/I	Sample Volume: 5 000	) MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		111011111111111111111111111111111111111
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.63	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	· 1		
Methylene chloride	0.15	5.0	· ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		,
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	0.15	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1	1.	
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.25	1	4,-	E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.43	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.16	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB #: D0602003
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-122A-6D2 Lab Sam	ple ID: D0602003-005 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/08/06 Date Extracted:	Date Analyzed: 12/11/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	1.4	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.16	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
I,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		,
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1 .	- N	
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

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Analytical M	ethod: SW8260						AAB #:D	0602003	**************************************
Lab Name:	Columbia Analyti	ical Services/Re	edding						
Field Sample	ID: <u>ASE-122A-</u>	-6D2	Lab	Sample ID:	D0602	003-005	Matrix: _V	Vater	
% Solids:						Initial Calib	ration ID: _	12/05/06M	SM
	d: <u>12/08/06</u>	Date I	Extracted:			Date Anal	yzed: 12/1	1/06	
	n Units (ug/L or ug								
	Analyte		MDL	RL	C	oncentration	Dilution	Confirm	Qualifier
	Tanaiy to		MDE	, , ,			Ditation	Continu	Quantite
					-	<del> </del>			
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			<u> </u>						
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					_				<u> </u>
St.	Sur	rogate		Recovery	$\top$	Control Limits	s Oua	lifier	
	4-Bromofluorob			100		82-124			
	Dibromofluoron		· · · · · · · · · · · · · · · · · · ·	100		84-127			
	Toluene-d8 - SS	•		100		80-117			
		Ir	nternal St	andard		Qualifier			
		Fluorobenzen							
		Chlorobenzer 1,4-Dichlorob		4	<del></del>				
		1,1 2101110100	ochizene u		-				
						Surrogate Recove	arias ara ranos	tad in Annana	lin O A
Comments:			,			Internal Stand			
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Analytical Method: SW8260		Α.	AB #: D0602003
Lab Name: Columbia Analytical Ser	vices/Redding		
Field Sample ID: ASE-124A-6D2	Lab Sample ID:	D0602003-006 M	Iatrix: Water
% Solids:		Initial Calibrat	tion ID: <u>12/05/06MSM</u>
Date Received: 12/08/06	Date Extracted:	Date Analyz	ed: 12/11/06
Concentration Units (ug/L or ug/K g dr	v weight): IIG/I	Sample Volume	5 000 MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		-
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.44	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	17	1		
1,1-Dichloroethane	0.12	2.0	2.8	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.24	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	. 1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.56	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		··
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Analytical Method: SW8260			AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical Ser	vices/Redding		
Field Sample ID: ASE-124A-6D2	Lab Sample ID	: D0602003-006	Matrix: Water
% Solids:		Initial Ca	alibration ID: 12/05/06MSM
Date Received: 12/08/06	Date Extracted:	Date A	nalyzed: 12/11/06
Concentration Units (ug/L or ug/Kg dr	v weight): IIG/I	Sample Volum	e: 5,000 MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.92	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.17	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Mo	ethod: SW8260		_					AAB #:D	0602003	
Lab Name:	Columbia Analyti	cal Services/	Redding							
Field Sample	ID: <u>ASE-124A-</u>	6D2		Lab Sa	mple I <u>D</u> : D	0602	003-006	Matrix: _V	Vater	- Annabarto
% Solids:	<u>.</u>						Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: <u>12/08/06</u>	Dat	e Extrac	ted: _			Date Anal	yzed: <u>12/1</u>	1/06	
Concentration	units (ug/L or ug	/Kg dry weig	ght): <u> </u>	J <b>G</b> /L		San	iple Volume:	5.000 M	<u>L</u>	
	Analyte		MI	)L	RL	C	oncentration	Dilution	Confirm	Qualifier
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<u> </u>			<u> </u>		<u> </u>				1.6.	
	4-Bromofluorob	rogate		, t	Recovery 98		Control Limits 82-124	s Qua	llifier	
	Dibromofluoron				100		84-127			
	Toluene-d8 - SS				99		80-117			
			Interna	ıl Stan	dard		Qualifier	•		
		Fluorobenz						-		
		Chlorobenz						_		
		1,4-Dichlor	obenzer	ie-d4						
Comments:					· · · · · · · · · · · · · · · · · · ·		Surrogate Recove Internal Stand	_		

Analytical Method: SW8260	<del></del>	AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical Serv	rices/Redding	
Field Sample ID: ASE-125A-6D2	Lab Sample ID: D060200	03-007 Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/08/06	Date Extracted:	Date Analyzed: 12/11/06
Concentration Units (ug/L or ug/Kg dry	weight): <u>UG/L</u> Samp	ele Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.22	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	0.19	1		E4
1,1-Dichloroethane	0.12	2.0	0.36	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	. 1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.25	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.23	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		•
4-methyl-2-pentanone	0.85	10	. ND	1		
Toluene	0.14	2.0	0.28	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

	Surrogate Recoveries are reported in Appendi.				
Comments:	Internal Standards are reported in Appendix O-C				

Analytical Method: SW8260			AAB #:
Lab Name: Columbia Analytical	Services/Redding		
Field Sample ID: ASE-125A-6D	2 Lab Sample ID:	D0602003-007	Matrix: Water
% Solids:		Initial Ca	llibration ID: 12/05/06MSM
Date Received: 12/08/06	Date Extracted:	Date A	nalyzed: 12/11/06
Concentration Units (ug/L or ug/K)	o dry weight): UG/L	Sample Volume	e 5 000 MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	1.1	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.29	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1 .		
Xylene (total)	0.14	10	, ND	1		
Styrene	0.16	2.0	ND	. 1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1	·	-
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	· ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	0.20	1		E4
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260						AAB #:D	0602003	
Lab Name:	Columbia Analyt	ical Services/Redding	3						
Field Sample	ID: <u>ASE-125A</u>	-6D2	Lab Sam	ple ID: [	0602	003-007	Matrix: W	/ater	
% Solids:						Initial Calib	ration ID:	12/05/06M	SM
Date Receive	d: 12/08/06	Date Extrac	eted:			Date Anal	yzed: 12/1	1/06	
		g/Kg dry weight):				nple Volume:			
	Analyte	M	DL	RL	C	oncentration	Dilution	Confirm	Qualifier
					+				
					-				
					-				
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							<del> </del>		
	Su	rrogate	Rec	covery	T	Control Limits	S Qua	lifier	
	4-Bromofluorol			99		82-124	, Qui		
	Dibromofluoror	mofluoromethane - SS		99		84-127			
	Toluene-d8 - SS	3		99	80-117				
	THE PROPERTY OF THE PROPERTY O		o de la companya de l	***************************************	<u> </u>				
		Interna	al Standa	rd		Qualifier			
Fluorobenzene Chlorobenzene-d5									
			ao d4		<del></del>				
		1,4-Dichlorobenzer	ne-u4						
Comments:						Surrogate Recove Internal Standa			
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Analytical Method: SW8260	AAB #:_ D0602003
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-128A-6D2 Lab Sample ID	D: D0602003-008 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/08/06 Date Extracted:	Date Analyzed: 12/11/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		-
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	. ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		-
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	ND	1		
Vinyl acetate	0.84	25	· ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.24	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	· ·	AAB #:D0602003
Lab Name: Columbia Analytical Serv	rices/Redding	
Field Sample ID: ASE-128A-6D2	Lab Sample ID: D06020	003-008 Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/08/06	Date Extracted:	Date Analyzed: 12/11/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sam	ple Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.32	I		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.17	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1.		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	I		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	. 1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260							AAB #:D	0602003	
Lab Name:	Columbia Analyti	ical Services/Re	edding	<u> </u>						
Field Sample	ID: ASE-128A-	-6D2		Lab Sa	ample ID:	D0602	2003-008	Matrix: _V	Vater	ninghorna.
% Solids:							Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	ed: 12/08/06	Date	Extrac	ted:			Date Anal	yzed: 12/1	1/06	
Concentration	n Units (ug/L or ug	g/Kg dry weigh	nt):	JG/L		San	nple Volume:	5.000 M	L_	
	Analyte		MI	DL	RL	C	Concentration	Dilution	Confirm	Qualifier
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		rrogate		F	Recovery	_	Control Limit	s Qua	lifier	
	4-Bromofluorob Dibromofluoron				101 99		82-124 84-127			
	Toluene-d8 - SS				99		80-117			
				·	·					
		I	nterna	l Stan	dard		Qualifier			
		Fluorobenzer			-	-		-		
		Chlorobenze						-		
		1,4-Dicilioro	Denzen	ic-u4						
							Surrogata Pacou	arias ara ranos	etad in Annana	lin O 1
Comments:							Surrogate Recove Internal Stand			

Analytical Method: SW8260	AAB #:D0602003	
Lab Name: Columbia Analytical Serv	ices/Redding	
Field Sample ID: ASE-95A-6D2	Lab Sample ID: D0602003-009 Matrix: Water	
% Solids:	Initial Calibration ID: 12/05/06MSM	_
Date Received: 12/08/06	Date Extracted: Date Analyzed:	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	0.70	1		E4
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.29	. 1		E4
Acetone	1.0	20	1.1	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	11		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	160	1		
1,1-Dichloroethane	0.12	2.0	7.2	1		
Vinyl acetate	0.84	25	ND.	11		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.27	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	. 1		
Chloroform	0.14	2.0	ND	1	y .	
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	11		
Carbon tetrachloride	0.18	2.0	ND	11		
Benzene	0.12	1.0	0.20	11		E4
1,2-Dichloroethane	0.18	1.0	ND	11		
Trichloroethene	0.10	1.0	0.25	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1	-	
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	11		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.20	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Internal Standards are reported in Appendix O-C
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Analytical Method: SW8260			AAB #: D0602003
Lab Name: Columbia Analytical Serv	vices/Redding		
Field Sample ID: ASE-95A-6D2	Lab Sample ID:	D0602003-009	Matrix: Water
% Solids:		Initial Calib	ration ID: <u>12/05/06MSM</u>
Date Received: 12/08/06	Date Extracted:	Date Anal	lyzed: 12/11/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	_5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	. 0.22	1.0	0.64	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.27	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	. 1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	0.21	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	0.16	1		E4
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Surrogate Recoveries are reported in Appendix O-A

Comments:

Internal Standards are reported in Appendix O-C

Analytical Mo	ethod: SW8260		_					AAB #:	D0602003	
Lab Name: Columbia Analytical Services/Redding										
Field Sample	Field Sample ID: ASE-95A-6D2 Lab Sample ID: D0602003-009 Matrix: Water									
% Solids:							Initial Calib	ration ID:	12/05/06M	SM
Date Receive	d: 12/08/06	Dat	e Extrac	ted: _	······································		Date Anal	yzed: <u>12</u>	11/06	
Concentration	า Units (ug/L or นยู	g/Kg dry weig	ght): <u> </u>	JG/L	<del></del>	San	nple Volume:	_5.000 N	<u>ML</u>	
	Analyte		MI	DL ,	RL	C	oncentration	Dilution	Confirm	Qualifier
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		rrogate		F	Recovery	(	Control Limits	S Q1	alifier	
	4-Bromofluorob Dibromofluoror				101 96		82-124 84-127			
	Toluene-d8 - SS				100		80-117			
			Interna	al Stan	dard		Qualifier	7		
		Fluorobenz	ene							
		Chlorobenz					_			
		1,4-Dichlor	obenzer	ie-d4						
									<u>.</u>	
Comments:							Surrogate Recove Internal Stand		orted in Appena orted in Appena	

Analytical Method: SW8260	Proportion of the Proportion o		AAB #:D0602003
Lab Name: Columbia Analytical Serv	rices/Redding		
Field Sample ID: ASE-95A-6D2DL	Lab Sample ID:	D0602003-009DL	Matrix: Water
% Solids:		Initial Calib	ration ID: <u>12/05/06MSM</u>
Date Received: 12/08/06	Date Extracted:	Date Anal	yzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	3.6	50	ND	10		D2
Chloromethane	2.3	50	ND	10		D2
Vinyl chloride	2.2	10	ND	10		D2
Bromomethane	2.7	10	ND	10		D2
Chloroethane	2.0	50	ND	10		D2
Trichlorofluoromethane	1.4	50	ND	10		D2
1,1-Dichloroethene	1.9	20	ND	10		D2
Acetone	10	200	11	10		D2E4
Carbon disulfide	1.1	50	ND	10		D2
Methylene chloride	1.5	50	ND	10		D2
Iodomethane	2.0	100	ND	10		D2
trans-1,2-Dichloroethene	1.6	20	ND	10		D2
Tert-butylmethylether	1.7	10	160	10		D2
1,1-Dichloroethane	1.2	20	5.7	10		D2E4
Vinyl acetate	8.4	250	ND ND	10		D2
2,2-Dichloropropane	3.3	20	ND	10		D2
cis-1,2-Dichloroethene	1.7	20	ND	10		D2
2-Butanone	9.0	100	ND	10		D2
Bromochloromethane	2.5	50	ND	10		D2
Chloroform	1.4	20	1.9	10		D2E4
1,1,1-Trichloroethane	1.4	20	ND	10		D2
1,1-Dichloropropene	1.8	20	ND	10		D2
Carbon tetrachloride	1.8	20	ND	10		D2
Benzene	1.2	10	ND	10		D2
1,2-Dichloroethane	1.8	10	ND	10		D2
Trichloroethene	1.0	10	ND	10		D2
1,2-Dichloropropane	1.7	20	ND	10		D2
Dibromomethane	1.8	20	ND	10		D2
Bromodichloromethane	1.7	10	ND	10		D2
cis-1,3-Dichloropropene	1.3	20	ND	10		D2
4-methyl-2-pentanone	8.5	100	ND	10		D2
Toluene	1.4	20	1.7	10		D2E4
trans-1,3-Dichloropropene	1.9	20	ND	10		D2

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260		AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical Ser	vices/Redding	
Field Sample ID: ASE-95A-6D2DL	Lab Sample ID:	D0602003-009DL Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/08/06	Date Extracted:	Date Analyzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry	v weight): UG/I	Sample Volume: 5 000 MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	2.2	10	ND	10		D2
Tetrachloroethene	2.2	10	ND	10		D2
1,3-Dichloropropane	1.1	20	ND	10		D2
2-Hexanone	5.8	100	ND	10		D2
Dibromochloromethane	1.5	20	ND	10		D2
1,2-Dibromoethane	1.5	20	ND	10		D2
Chlorobenzene	1.5	10	ND	10		D2
1,1,1,2-Tetrachloroethane	2.3	50	ND	10		D2
Ethylbenzene	1.5	20	ND	10		D2
Xylene (total)	1.4	100	ND	10		D2
Styrene	1.6	20	ND	10		D2
Bromoform	1.8	50	ND	10		D2
Isopropylbenzene	1.7	20	ND	10		D2
1,1,2,2-Tetrachloroethane	1.7	10	ND	10		D2
Bromobenzene	1.7	50	ND	10		D2
1,2,3-Trichloropropane	2.0	100	ND	10		D2
n-Propylbenzene	1.3	20	ND	10		D2
2-Chlorotoluene	1.6	50	ND	10		D2
1,3,5-Trimethylbenzene	1.5	20	ND	10		D2
4-Chlorotoluene	1.6	50	ND	10		D2
tert-Butylbenzene	1.8	50	ND	10		D2
1,2,4-Trimethylbenzene	1.3	20	ND	10		D2
sec-Butylbenzene	1.7	50	ND	10		D2
1,3-Dichlorobenzene	1.1	10	ND	10		D2
p-Isopropyltoluene	1.0	20	ND	10		D2
1,4-Dichlorobenzene	1.1	10	ND	10		D2
n-Butylbenzene	3.3	50	ND	10		D2
1,2-Dichlorobenzene	1.4	10	ND	10		D2
1,2-Dibromo-3-chloropropane	8.1	50	ND	10		D2
1,2,4-Trichlorobenzene	3.6	50	ND	10		D2
Hexachlorobutadiene	6.0	10	ND	10		D2
Naphthalene	2.9	20	ND	10		D2
1,2,3-Trichlorobenzene	3.7	50	ND	10		D2

Comments:	Internal Standards are reported in Appendix O-A
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Analytical M	ethod: SW8260							AAB #:D	0602003	
Lab Name:	Columbia Analyti	ical Services/Rec	lding	******						
Field Sample	ID: ASE-95A-6	D2DL	L	ab Sa	ample ID: D	0602	003-009DL	Matrix: _V	Vater	
% Solids:	70 M C C C C C C C C C C C C C C C C C C						Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: 12/08/06	Date E	xtracte	d:			Date Anal	yzed: 12/1	2/06	· · · · ·
Concentration	n Units (ug/L or ug	y/Kg dry weight)	: <u>U</u>	G/L		San	nple Volume:	5.000 M	L	
	Analyte		MDI		RL	C	oncentration	Dilution	Confirm	Qualifier
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	Sur	rogate		F	Recovery		Control Limits	S Qua	lifier	· · ·
	4-Bromofluorob			98			82-124			
	Dibromofluoron			·	95		84-127			
	Toluene-d8 - SS			·	96		80-117			
	And an include the control of the co	T	ternal	C4 a se	.11		Ovelifier			
		Fluorobenzene		Stan	uaru		Qualifier			
Chlorobenzene-d5										
		1,4-Dichlorobe	enzene	-d4						
							Surrogate Recove Internal Stand			
Comments:							iniernai Siandi	uras are repor	iea in Append	ix U-C

Analytical Method: SW8260			AAB #: <u>D0602003</u>	
Lab Name: Columbia Analytical S	ervices/Redding			
Field Sample ID: ASE-96A-6D2	Lab Sample ID:	D0602003-010	Matrix: Water	
% Solids:		Initial Ca	libration ID: 12/05/06MSM	
Date Received: 12/08/06	Date Extracted:	Date A	nalyzed: 12/11/06	_
Concentration Units (ug/L or ug/Vg	dry weight): UG/I	Sample Volume	s 5 000 MI	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	2.0	1		
Bromomethane	0.27	1.0	ND	11		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	1.1	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	190	1		
1,1-Dichloroethane	0.12	2.0	10	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	1.0	.1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	1.2	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.17	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C
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Analytical Method: SW8260	AAB #:	
Lab Name: Columbia Analytical Serv	ices/Redding	
Field Sample ID: ASE-96A-6D2	Lab Sample ID: D0602003-010 Matrix: Water	
% Solids:	Initial Calibration ID: 12/05/06MSM	
Date Received: 12/08/06	Date Extracted: Date Analyzed:	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.50	I		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	l		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.45	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1	·	
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1	-	
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	0.17	1		E4
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C
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Analytical M	ethod: SW8260		<del>-</del>					AAB #:D	0602003	
Lab Name:	Columbia Analyt	ical Services/	Redding	ÿ						
	ID: ASE-96A-6				ample ID: D	0602	003-010	Matrix: _V	Vater	_
% Solids:							Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: 12/08/06	Dat	te Extrac	ted:			Date Anal	yzed: 12/1	1/06	
Concentration	n Units (ug/L or ug	g/Kg dry wei	ght):	UG/L		San	nple Volume:	5.000 M	<u>L</u>	
	Analyte		MI	DL	RL	C	oncentration	Dilution	Confirm	Qualifier
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	Sur	rrogate		I	Recovery		Control Limits	S Qua	lifier	
	4-Bromofluorob			ļ			82-124			
	Dibromofluoron Toluene-d8 - SS						84-127 80-117			
	Toluche-do - 33				101	+	80-117			
			Toda	1.64	3. 3		0.116	7		
Interna Fluorobenzene Chlorobenzene-d5		ai Stan	dard		Qualifier	-				
		1,4-Dichlor	robenzer	ne-d4			·			
							Surrogate Recove			
Comments:							Internal Stande	ards are repor	ted in Append	ix O-C

Analytical Method: SW8260	AAB #:_ D0602003					
Lab Name: Columbia Analytical Serv	vices/Redding					
Field Sample ID: ASE-96A-6D2DL	Lab Sample 1D: D0602003-010DL Matrix: Water					
% Solids:	Initial Calibration ID: 12/05/06MSM					
Date Received: 12/08/06	Date Extracted: Date Analyzed: 12/12/06					
Concentration Units (ug/L or ug/Kg dry weight): UG/L Sample Volume: 5.000 ML						

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	3.6	50	ND	10		D2
Chloromethane	2.3	50	ND	10		D2
Vinyl chloride	2.2	10	2.7	10		D2E4
Bromomethane	2.7	10	ND	10		D2
Chloroethane	2.0	50	ND	10		D2
Trichlorofluoromethane	1.4	50	ND	10		D2
1,1-Dichloroethene	1.9	20	ND	10		D2
Acetone	10	200	ND	10		D2
Carbon disulfide	1.1	50	ND	10		D2
Methylene chloride	1.5	50	ND	10		D2
lodomethane	2.0	100	ND	10		D2
trans-1,2-Dichloroethene	1.6	20	ND	10		D2
Tert-butylmethylether	1.7	10	220	10		D2
1,1-Dichloroethane	1.2	20	10	10		D2E4
Vinyl acetate	8.4	250	ND	10		D2
2,2-Dichloropropane	3.3	20	ND	10		D2
cis-1,2-Dichloroethene	1.7	20	ND	10		D2
2-Butanone	9.0	100	ND	10		D2
Bromochloromethane	2.5	50	ND	10		D2
Chloroform	1.4	20	ND	10		. D2
1,1,1-Trichloroethane	1.4	20	ND	10	-	D2
1,1-Dichloropropene	1.8	20	ND	10		D2
Carbon tetrachloride	1.8	. 20	ND	10		D2
Benzene	1.2	10	ND	10		D2
1,2-Dichloroethane	1.8	10	ND	10		D2
Trichloroethene	1.0	10	ND	10		D2
1,2-Dichloropropane	1.7	20	ND	10		D2
Dibromomethane	1.8	20	ND	10		D2
Bromodichloromethane	1.7	10	ND	10		D2
cis-1,3-Dichloropropene	1.3	20	ND	10		D2
4-methyl-2-pentanone	8.5	100	ND	10		D2
Toluene	1.4	20	ND	10		D2
trans-1,3-Dichloropropene	1.9	20	ND	10		D2

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	·	AAB #:D0602003	
Lab Name: Columbia Analytical Ser	vices/Redding		
Field Sample ID: <u>ASE-96A-6D2DL</u>	Lab Sample ID:	D0602003-010DL Matrix: Water	
% Solids:		Initial Calibration ID: 12/05/06MSM	
Date Received: 12/08/06	Date Extracted:	Date Analyzed: 12/12/06	
Concentration Units (ug/L or ug/V a dr	y weight): LIG/I	Sample Volume: 5 000 MI	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	2.2	10	ND	10		D2
Tetrachloroethene	2.2	10	ND	10		D2
1,3-Dichloropropane	1.1	20	ND	10		D2
2-Hexanone	5.8	100	ND	10		D2
Dibromochloromethane	1.5	20	ND	10		D2
1,2-Dibromoethane	1.5	20	ND	10		D2
Chlorobenzene	1.5	10	ND	10		D2
1,1,1,2-Tetrachloroethane	2.3	50	ND	10		D2
Ethylbenzene	1.5	20	ND	10		D2
Xylene (total)	1.4	100	ND	10		D2
Styrene	1.6	20	ND	10		D2
Bromoform	1.8	50	ND	10		D2
Isopropylbenzene	1.7	20	ND	10		D2
1,1,2,2-Tetrachloroethane	1.7	10	ND	10		D2
Bromobenzene	1.7	50	ND	10		D2
1,2,3-Trichloropropane	2.0	100	ND	10		D2
n-Propylbenzene	1.3	20	ND	10		D2
2-Chlorotoluene	1.6	50	ND	10		D2
1,3,5-Trimethylbenzene	1.5	20	ND	10		D2
4-Chlorotoluene	1.6	50	ND	10		D2
tert-Butylbenzene	1.8	50	ND	10		D2
1,2,4-Trimethylbenzene	1.3	20	ND	10		D2
sec-Butylbenzene	1.7	50	ND	10		D2
1,3-Dichlorobenzene	1.1	10	ND	10		D2
p-Isopropyltoluene	1.0	20	ND	10		D2
1,4-Dichlorobenzene	1.1	10	ND	10		D2
n-Butylbenzene	3.3	50	ND	10		D2
1,2-Dichlorobenzene	1.4	10	ND	10		D2
1,2-Dibromo-3-chloropropane	8.1	50	ND	10		D2
1,2,4-Trichlorobenzene	3.6	50	ND	10		D2
Hexachlorobutadiene	6.0	10	ND	10		D2
Naphthalene	2.9	20	ND	10		D2
1,2,3-Trichlorobenzene	3.7	50	ND	10		D2

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C
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Analytical Method: SW8260					AAB #:D	0602003			
Lab Name:	Columbia Analyti	ical Services/Red	dding						
Field Sample	ID: ASE-96A-6	5D2DL	Lab	Sample ID:	D0602	2003-010DL	Matrix: _V	Vater	· · · · ·
% Solids:						Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: 12/08/06	Date E	xtracted:			Date Anal	yzed: _12/1	2/06	
	n Units (úg/L or ug								
	Analyte		MDL	RL	С	oncentration	Dilution	Confirm	Qualifier
<b>.</b>									
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				-					
	Sur	rogate		Recovery		Control Limit	s Qua	lifier	
	4-Bromofluorob	enzene - SS		98		82-124			
	Dibromofluoron		-	98		84-127			
	Toluene-d8 - SS			95		80-117			
	L					<del></del>			
			ternal St	andard		Qualifier	_		
		Fluorobenzene Chlorobenzene					_		
		1,4-Dichlorobe		4			-		
						Surrogate Recove	ories are renor	ted in Annana	lix O-1
Comments:						Internal Stand			
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Analytical Method: SW8260	and the second s		AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical S	ervices/Redding		
Field Sample ID: ASE-98A-6D2	Lab Sample ID	: D0602003-011	Matrix: Water
% Solids:		Initial Ca	alibration ID: 12/05/06MSM
Date Received: 12/08/06	Date Extracted:	Date A	nalyzed: 12/11/06
Concentration Units (ug/L or ug/Kg)	dry weight): HG/I	Sample Volum	e: 5,000 MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	I		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	ND	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1	·	
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.29	1	r _	E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.16	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:			Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C			

Analytical Method: SW8260	-		AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical Serv	ices/Redding		
Field Sample ID: ASE-98A-6D2	Lab Sample ID:	D0602003-011	Matrix: Water
% Solids:		Initial Calib	ration ID: <u>12/05/06MSM</u>
Date Received: 12/08/06	Date Extracted:	Date Anal	yzed: 12/11/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.29	1 .		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.18	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1	·	
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Analytical M	ethod: SW8260					AAB #:	D0602003	
Lab Name:	Columbia Analy	tical Services/Reddin	g					
Field Sample	ID: ASE-98A-	6D2	Lab S	ample I <u>D:</u>	D0602003-011	Matrix: _	Water	
% Solids:					Initial Ca	libration ID:	12/05/06M	SM
Date Receive	ed: 12/08/06	Date Extra	cted:	•	Date Ar	nalyzed: 12/	11/06	
		g/Kg dry weight):						
			DL	I	Concentratio	T	<u> </u>	Onelifie
	Analyte	j 1A1	VL	RL	Concentratio	n Dhudon	Connin	Qualifie
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	Su	rrogate	]	Recovery	Control Lin	nits Qu	alifier	
	4-Bromofluoro		-	101	82-124		<u></u>	
	Dibromofluoro Toluene-d8 - S			98 100	84-127 80-117			
	Totache do S	<u> </u>		100	00 117			
	Louiseassa	_	1.04	1 1	0 116		***************************************	
		Fluorobenzene	al Star	idard	Qualifie	<u>EF</u>		
		Chlorobenzene-d5						
		1,4-Dichlorobenze	ne-d4	**************************************				
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Analytical Method: SW8260	·		AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical S	ervices/Redding		
Field Sample ID: ASE-99A-6D2	Lab Sample ID:	D0602003-012	Matrix: Water
% Solids:		Initial Ca	libration ID: 12/05/06MSM
Date Received: 12/08/06	Date Extracted:	Date A	nalyzed: 12/11/06
Concentration Units (ug/L or ug/Kg	dry weight): LIG/I	Sample Volume	5 000 MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	I		
I,1-Dichloroethane	0.12	2.0	ND	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.34	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

	Surrogate Recoveries are reported in Append Internal Standards are reported in Append				
Comments:	internat Standards are reported in Appendix O-C				

Analytical Method: SW8260			AAB #:	
Lab Name: Columbia Analytical Serv	rices/Redding			
Field Sample ID: ASE-99A-6D2	Lab Sample ID:	D0602003-012	Matrix: Water	
% Solids:		Initial Calib	oration ID: 12/05/06MSM	
Date Received: 12/08/06	Date Extracted:	Date Anal	lyzed: 12/11/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/I	Sample Volume	5 000 MI	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.26	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.20	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Internal Standards are reported in Appendix O-C
tennesses and the second secon	

Analytical Method: SW8260					AAB #:D	0602003	
Lab Name: Columbia Anal	ytical Services/Reddin	<u>g</u>					
Field Sample ID: ASE-99A	-6D2	Lab Sample	ID: D06	02003-012	Matrix: _V	Vater	
% Solids:				Initial Calib	ration ID: _	12/05/06M	SM
Date Received: 12/08/06	Date Extra	cted:		Date Anal	yzed: <u>12/1</u>	1/06	
Concentration Units (ug/L or	ug/Kg dry weight):	UG/L	S	ample Volume:	5.000 MI		
Analyte	М	DL	RL	Concentration	Dilution	Confirm	Qualifier
					***************************************		
		· · ·					
		Daisan		Control Limite		1:0:	
	urrogate obenzene - SS	Recov	ery	Control Limits 82-124	Qua	lifier	
	omethane - SS	98		84-127			
Toluene-d8 -	SS	98		80-117			
	Intern	nal Standard		Qualifier			
	Fluorobenzene						
	Chlorobenzene-d5				-		
	1,4-Diemoroccize	JIIC-U-Y					
				Surrogate Recove	eries are repor	ted in Append	lix O-A
Comments:				Internal Stand			

Analytical Method: SW8260		AAB #: <u>D0602003</u>	
Lab Name: Columbia Analytical Serv	vices/Redding		
Field Sample ID: PL-501-6D2	Lab Sample 1D: D060200	03-013 Matrix: Water	
% Solids:		Initial Calibration ID: 12/05/06MS	SM
Date Received: 12/08/06	Date Extracted:	Date Analyzed: 12/11/06	
Concentration Units (ug/L or ug/Kg dry	weight): <u>UG/L</u> Samp	le Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	2.1	1		E4
Carbon disulfide	0.11	5.0	ND	. 1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	ND	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	. 1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	1.8	1		E4
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	· 1		/ 'Al
1,1,1-Trichloroethane	0.14	2.0	ND	11		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	0.31	1		E4
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	1.4	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Analytical Method: SW8260	<del>-</del>		AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical Services	/Redding		
Field Sample ID: PL-501-6D2	Lab Sample ID:	D0602003-013	Matrix: Water
% Solids:		Initial Calib	oration ID: 12/05/06MSM
Date Received: 12/08/06 Da	te Extracted:	Date Ana	lyzed: 12/11/06
Concentration Units (ug/L or ug/Kg dry wei	ght): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	2.6	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	0.45	1		E4
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	1.6	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	. 1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	1.7	1		. E4
Isopropylbenzene	0.17	2.0	ND	1	·	
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	0.69	1		E4
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	0.20	1		E4
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260					AAB #: D	0602003	
Lab Name:	Columbia Analyt	ical Services/R	Redding	_				
Field Sample	ID: <u>PL-501-6</u> D	)2	Lal	b Sample ID: D	00602003-013	Matrix: V	Vater	
% Solids:					Initial Calib	ration ID:	12/05/06M	SM
Date Receive	ed: 12/08/06	Date	Extracted	:	Date Ana	yzed: 12/1	1/06	
					Sample Volume:			
-	Analyte		MDL		Concentration	I	T	Qualifi
	Allalyte		MIDL	- KL	Concentration	Dilution	Continu	Quann
							1	
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	Su	rrogate		Recovery	Control Limit	s Qua	lifier	
	4-Bromofluorol			99	82-124			
	Dibromofluoro			98	84-127			
	Toluene-d8 - SS	S	·	100	80-117			
							<del></del>	
			Internal S	tandard	Qualifier			
		Fluorobenze	ne	Miles III and				
Chlorobenze								
		1,4-Dichloro	benzene-	14				
					Surrogate Recov			
Comments:					Internal Stana	ards are repor	ted in Append	lix O-C
							/··	

Analytical Method: SW8260	<u> </u>	AAB #: <u>D0602003</u>	
Lab Name: Columbia Analytical Service	ces/Redding		
Field Sample 1D: PL-502-6D2	Lab Sample 1D: I	D0602003-014 Matrix: Water	
% Solids:		Initial Calibration 1D: 12/05/06M	1SM
Date Received: 12/08/06	Date Extracted:	Date Analyzed: 12/11/06	
Concentration Units (ug/L or ug/Kg dry v	veight): <u>UG/L</u>	Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.60	1		E4
Acetone	1.0	20	1.1	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
lodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	0.15	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.25	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.44	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical Service	es/Redding
Field Sample ID: PL-502-6D2	Lab Sample ID: D0602003-014 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/08/06	Date Extracted: Date Analyzed: 12/11/06
Concentration Units (ug/L or ug/Kg dry v	veight): UG/L Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	1.5	1		-
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260	***************************************			AAB #:	0602003	
Lab Name: Columbia Analyti	ical Services/Redding					
Field Sample ID: PL-502-6D2	2	Lab Sample ID: D	00602003-014	Matrix: _V	Vater	
% Solids:			Initial Calib	ration ID:	12/05/06MS	SM
Date Received: 12/08/06	Date Extrac	ted:	Date Anal	yzed: 12/1	1/06	
Concentration Units (ug/L or ug						
Analyte	MI	DL RL	Concentration	Dilution	Confirm	Qualifie
						West and the second sec
				***************************************		
					<u> </u>	
Sur	rogate	Recovery	Control Limit	s Qua	lifier	. 4
4-Bromofluorob	enzene - SS	101	82-124			
Dibromofluoron		99	84-127			
Toluene-d8 - SS		100	80-117			
	Interna	l Standard	Qualifier			
	Fluorobenzene			_		
	Chlorobenzene-d5					
	1,4-Dichlorobenzen	e-d4				
			Surrogate Recove			
Comments:			Internal Stand	aras are repoi	iea in Appena	it U-C

### ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260			AAB #: <u>D0602003</u>		
Lab Name: Columbia Analytical	Services/Redding				
Field Sample ID: TB-120606	Lab Sample ID:	D0602003-015	Matrix: Water		
% Solids:		Initial Ca	alibration ID: 12/05/06MSM		
Date Received: 12/08/06	Date Extracted:	Date Analyzed: 12/11/06			
Concentration Units (ug/L or ug/Ka	dry weight): UG/I	Sample Volum	e 5 000 MI		

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	2.1	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	ND	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	. ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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### ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260			AAB #: <u>D0602003</u>	
Lab Name: Columbia Analytical S	ervices/Redding			
Field Sample ID: TB-120606	Lab Sample ID	: D0602003-015	Matrix: Water	
% Solids:		Initial Ca	alibration ID: 12/05/06MSM	1
Date Received: 12/08/06	Date Extracted:	Date Extracted: Date Analyzed: 12/1		
Concentration Units (ug/L or ug/Kg	dry weight): UG/I	Sample Volum	e: 5,000 MI	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	ND	. 1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	. 1		
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		-
4-Chlorotoluene	0.16	5.0	ND	1		,
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1	·	
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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### ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical M	nalytical Method: SW8260					AAB#: D0602003			
Lab Name:	Columbia Analyti	ical Services/Redding	3						
Field Sample	ID: <u>TB-120606</u>	· · · · · · · · · · · · · · · · · · ·	Lab Sa	mple ID: D	0602	003-015	Matrix: _V	√ater	· .
% Solids:						Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: 12/08/06	Date Extrac	cted:			Date Anal	yzed: 12/1	1/06	
		g/Kg dry weight):				nple Volume:			
	Analyte	MI	DL	RL	C	oncentration	Dilution	Confirm	Qualifier
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		rrogate	R	Recovery		Control Limits	Qua	lifier	
	4-Bromofluorob Dibromofluoron		<u> </u>	100 99		82-124 84-127			
	Toluene-d8 - SS	<del></del>		100	80-117				
						*****			
		Interna	al Stan	dard		Qualifier	·		
		Fluorobenzene					]		
Chlorobenzene-1,4-Dichloroben		Chlorobenzene-d5	. 14				_		
		1,4-Dichlorobenzei	ne-a4						
						Comments Descri		4.1.	
Comments:						Surrogate Recove Internal Stand			
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### ORGANIC ÁNALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260	AAB #:D0602003
Lab Name: Columbia Analytical Serv	rices/Redding
Field Sample ID: ASE-109A-6D2	Lab Sample ID: D0602003-016 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/08/06	Date Extracted: Date Analyzed:
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.30	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	I	·	
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	ND	1		
Vinyl acetate	0.84	- 25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.18	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.22	1		E4
1,2-Dichloropropane	0.17	2.0	ND	I		,
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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### ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260			AAB #:_	D0602003	
Lab Name: Columbia Analytical Serv	ices/Redding				
Field Sample ID: ASE-109A-6D2	Lab Sample ID:	D0602003-016	Matrix:	Water	
% Solids:		Initial Calibr	ation ID	: 12/05/06MSM	_
Date Received: 12/08/06	Date Extracted:	Date Analy	/zed: <u>12</u>	2/11/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/I	Sample Volume	5 000	MI	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.86	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1 .		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C

### ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical M	ethod: SW8260							AAB #:D	0602003	
Lab Name:	Columbia Analyti	ical Services/R	edding							
Field Sample	ID: ASE-109A-	-6D2		Lab Sa	ample ID: D	06020	03-016	Matrix: _V	Vater	Proportion and the second
% Solids:	, control is productive and relative for the relative for						Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: <u>12/08/06</u>	Date	Extrac	ted: _			_ Date Anal	yzed: <u>12/1</u>	1/06	
Concentration	n Units (ug/L or ug	g/Kg dry weigh	nt): <u> </u>	JG/L		Samp	ple Volume:	5.000 M	L	
	Analyte		MI	)L	RL	Co	ncentration	Dilution	Confirm	Qualifie
				PWW.MATELESTA.CO.C.						
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,										
	Sur	rogate		F	Recovery	C	ontrol Limit	s Qua	lifier	
	4-Bromofluorob				100		82-124			
	Dibromofluoron Toluene-d8 - SS	······································			101	-	84-127 80-117			
	Totache-da - 33				100	<del> </del>	80-117			
		I Fluorobenzer	nterna	l Stan	dard		Qualifier	_		
		Chlorobenzer						-		
		1,4-Dichloro		e-d4						
	'							ouwell .		
							Surrogate Recove	eries are repor	ted in Appena	lix O-A
Comments:							Internal Stand	ards are repor	ted in Appena	lix O-C

# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260	AAB #: D0602003
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-123A-6D2 Lab Sample ID: D0602003-0	Matrix: Water
% Solids: Initial	ial Calibration ID: 12/05/06MSM
Date Received: 12/08/06 Date Extracted: D	ate Analyzed: 12/11/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L Sample Vo	olume: _5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	. 1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	. 1		,
1,1-Dichloroethene	0.19	2.0	0.23	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		-
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	ND	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.15	1		E4 ·
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

### ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260			AAB #: <u>D060200</u>	)3
Lab Name: Columbia Analytical Ser	vices/Redding			
Field Sample ID: ASE-123A-6D2	Lab Sample ID	: D0602003-017	Matrix: Water	
% Solids:		Initial Ca	libration ID: <u>12/05/0</u>	06MSM
Date Received: 12/08/06	Date Extracted:	Date A	nalyzed: 12/11/06	
Concentration Units (ug/L or ug/Kg dm	wwight): LIG/I	Sample Volume	. 5 000 MI	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.56	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	. ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	. 1		* 1
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		•
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1	·	
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Mo	ethod: SW8260						AAB #:D	0602003	
Lab Name:	Columbia Analyti	ical Services/Red	ding						
Field Sample	ID: <u>ASE-123A-</u>	-6D2	Lab S	ample ID: I	06020	003-017	Matrix: _V	Vater	
% Solids:						Initial Calib			
	d: 12/08/06	Date Ex	ctracted:				_	***************************************	
	Units (ug/L or ug					ple Volume:			
·.				1				T	
	Analyte		MDL	RL	Co	oncentration	Dilution	Confirm	Qualifie
				1	+				
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	F		····						
	4-11-11-11-11-11-11-11-11-11-11-11-11-11	rogate	]	Recovery	-	Control Limits	S Qua	lifier	
	4-Bromofluorob			100	-	82-124			
	Dibromofluoron Toluene-d8 - SS			98 99	-	84-127 80-117			
	Toruche do Ba				1	00-117			
			ernal Star	ndard		Qualifier	_		
		Fluorobenzene	15			-	-		
		Chlorobenzene 1,4-Dichlorobe				7. 3. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	-		
	i	1,121011101000	1120110 (11	TO THE ROTH WAS ARRESTED AS A STATE OF THE S	- moon pometime		_		
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Comments:						Surrogate Recove Internal Stando			
Committee.							•		MANAGE TO A STATE OF THE STATE
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Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	· 
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1211W01
Lab Sample ID: M1211W01	
Initial Calibration ID: 12/05/06MSM	

Analyte	MDL	Method Blank	RL	Q
Dichlorodifluoromethane	0.36	ND	5.0	
Chloromethane	0.23	ND	5.0	
Vinyl chloride	0.22	ND	1.0	
Bromomethane	0.27	ND	1.0	
Chloroethane	0.20	ND	5.0	
Trichlorofluoromethane	0.14	ND	5.0	
1,1-Dichloroethene	0.19	ND	2.0	
Acetone	1.0	ND	20	
Carbon disulfide	0.11	ND	5.0	
Methylene chloride	0.15	ND	5.0	
Iodomethane	0.20	ND	10	
trans-1,2-Dichloroethene	0.16	ND	2.0	
Tert-butylmethylether	0.17	ND	1.0	
1,1-Dichloroethane	0.12	ND	2.0	
Vinyl acetate	0.84	ND	25	
2,2-Dichloropropane	0.33	ND	2.0	
cis-1,2-Dichloroethene	0.17	ND	2.0	
2-Butanone	0.90	ND	10	
Bromochloromethane	0.25	ND	5.0	
Chloroform	0.14	ND	2.0	
1,1,1-Trichloroethane	0.14	ND	2.0	
1,1-Dichloropropene	0.18	ND	2.0	
Carbon tetrachloride	0.18	ND	2.0	
Benzene	0.12	ND	1.0	
1,2-Dichloroethane	0.18	ND	1.0	
Trichloroethene	0.10	ND	1.0	
1,2-Dichloropropane	0.17	ND	2.0	
Dibromomethane	0.18	ND	2.0	
Bromodichloromethane	0.17	ND	1.0	
cis-1,3-Dichloropropene	0.13	ND	2.0	
4-methyl-2-pentanone	0.85	ND	10	
Toluene	0.14	ND	2.0	
trans-1,3-Dichloropropene	0.19	ND	2.0	

Comments:	

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	· · · · · · · · · · · · · · · · · · ·
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1211W01
Lab Sample ID: M1211W01	

Initial Calibration ID: 12/05/06MSM

Analyte	MDL	Method Blank	RL	Q
1,1,2-Trichloroethane	0.22	ND	1.0	
Tetrachloroethene	0.22	ND	1.0	
1,3-Dichloropropane	0.11	ND	2.0	
2-Hexanone	0.58	ND	10	
Dibromochloromethane	0.15	ND ND	2.0	
1,2-Dibromoethane	0.15	ND	2.0	
Chlorobenzene	0.15	ND	1.0	
1,1,1,2-Tetrachloroethane	0.23	ND	5.0	
Ethylbenzene	0.15	ND	2.0	
Xylene (total)	0.14	ND	10	
Styrene	0.16	ND	2.0	
Bromoform	0.18	ND	5.0	
Isopropylbenzene	0.17	ND	2.0	
1,1,2,2-Tetrachloroethane	0.17	ND	1.0	
Bromobenzene	0.17	ND	5.0	
1,2,3-Trichloropropane	0.20	ND	10	
n-Propylbenzene	0.13	ND	2.0	
2-Chlorotoluene	0.16	ND	5.0	
1,3,5-Trimethylbenzene	0.15	ND	2.0	
4-Chlorotoluene	0.16	ND ND	5.0	
tert-Butylbenzene	0.18	ND	5.0	
1,2,4-Trimethylbenzene	0.13	ND	2.0	
sec-Butylbenzene	0.17	ND	5.0	
1,3-Dichlorobenzene	0.11	ND	1.0	
p-Isopropyltoluene	0.10	ND	2.0	
1,4-Dichlorobenzene	0.11	ND	1.0	
n-Butylbenzene	0.33	ND	5.0	
1,2-Dichlorobenzene	0.14	ND	1.0	
1,2-Dibromo-3-chloropropane	0.81	ND	5.0	
1,2,4-Trichlorobenzene	0.36	ND	5.0	
Hexachlorobutadiene	0.60	ND	1.0	
Naphthalene	0.29	ND	2.0	
1,2,3-Trichlorobenzene	0.37	ND	5.0	

Comments:	

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1211W01
Lab Sample ID: M1211W01	
Initial Calibration ID: 12/05/06MSM	

MDL	Method Blank	RL	Q
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	MDL	MDL Method Blank	MDL Method Blank RL

Surrogate	Recovery	Control Limits	Qualifier
4-Bromofluorobenzene - SS	100	82-124	
Dibromofluoromethane - SS	98	84-127	
Toluene-d8 - SS	99	80-117	

Internal Standard	Qualifier
Fluorobenzene	
Chlorobenzene-d5	
1,4-Dichlorobenzene-d4	

Comments:			

Analytical Method: SW8260	AAB #:D0602003
Lab Name: Columbia Analytical Services/Redding	<del></del>
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1212W01
Lab Sample ID: M1212W01	
Initial Calibration ID: 12/05/06MSM	

Analyte	MDL	Method Blank	RL	Q
Dichlorodifluoromethane	0.36	ND	5.0	
Chloromethane	0.23	ND	5.0	
Vinyl chloride	0.22	ND	1.0	
Bromomethane	0.27	ND	1.0	
Chloroethane	0.20	ND	5.0	
Trichlorofluoromethane	0.14	ND	5.0	
1,1-Dichloroethene	0.19	ND	2.0	
Acetone	1.0	ND	20	
Carbon disulfide	0.11	ND	5.0	
Methylene chloride	0.15	ND	5.0	
Iodomethane	0.20	ND	10	
trans-1,2-Dichloroethene	0.16	ND	2.0	
Tert-butylmethylether	0.17	ND	1.0	
1,1-Dichloroethane	0.12	ND	2.0	
Vinyl acetate	0.84	ND	25	
2,2-Dichloropropane	0.33	ND	2.0	
cis-1,2-Dichloroethene	0.17	ND	2.0	
2-Butanone	0.90	ND	10	
Bromochloromethane	0.25	ND	5.0	
Chloroform	0.14	ND	2.0	
1,1,1-Trichloroethane	0.14	ND	2.0	
1,1-Dichloropropene	0.18	ND	2.0	
Carbon tetrachloride	0.18	ND	2.0	
Benzene	0.12	ND	1.0	
1,2-Dichloroethane	0.18	ND	1.0	
Trichloroethene	0.10	ND	1.0	
1,2-Dichloropropane	0.17	ND	2.0	
Dibromomethane	0.18	ND	2.0	
Bromodichloromethane	0.17	ND	1.0	
cis-1,3-Dichloropropene	0.13	ND	2.0	
4-methyl-2-pentanone	0.85	ND	10	
Toluene	0.14	ND	2.0	
trans-1,3-Dichloropropene	0.19	ND	2.0	

Comments:	

Analytical Method: SW8260	AAB #:D0602003
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1212W01
Lab Sample ID: M1212W01	
Initial Calibration ID: 12/05/06MSM	

Analyte	MDL	Method Blank	RL	Q
1,1,2-Trichloroethane	0.22	ND	1.0	
Tetrachloroethene	0.22	ND	1.0	
1,3-Dichloropropane	0.11	ND	2.0	
2-Hexanone	0.58	ND	10	
Dibromochloromethane	0.15	ND	2.0	
1,2-Dibromoethane	0.15	ND	2.0	
Chlorobenzene	0.15	ND	1.0	
1,1,1,2-Tetrachloroethane	0.23	ND	5.0	
Ethylbenzene	0.15	ND	2.0	
Xylene (total)	0.14	ND	10	
Styrene	0.16	ND	2.0	
Bromoform	0.18	ND	5.0	
Isopropylbenzene	0.17	ND	2.0	
1,1,2,2-Tetrachloroethane	0.17	ND	1.0	
Bromobenzene	0.17	ND	5.0	
1,2,3-Trichloropropane	0.20	ND.	10	
n-Propylbenzene	0.13	ND	2.0	
2-Chlorotoluene	0.16	ND	5.0	
1,3,5-Trimethylbenzene	0.15	ND	2.0	
4-Chlorotoluene	0.16	ND	5.0	
tert-Butylbenzene	0.18	ND	5.0	
1,2,4-Trimethylbenzene	0.13	ND	2.0	
sec-Butylbenzene	0.17	ND	5.0	
1,3-Dichlorobenzene	0.11	ND	1.0	
p-Isopropyltoluene	0.10	ND	2.0	
1,4-Dichlorobenzene	0.11	ND	1.0	
n-Butylbenzene	0.33	ND	5.0	
1,2-Dichlorobenzene	0.14	ND	1.0	
1,2-Dibromo-3-chloropropane	0.81	ND	5.0	
1,2,4-Trichlorobenzene	0.36	ND	5.0	
Hexachlorobutadiene	0.60	ND ND	1.0	
Naphthalene	0.29	ND	2.0	
1,2,3-Trichlorobenzene	0.37	ND	5.0	

Comments:			

Analytical	Method: SW8260		AAB #: _	D0602003	· 	
Lab Name:	Columbia Analy	ytical Services/Reddin	ıg			
	ion Units (ug/L or 1		Met	hod Blank ID: <u>M12</u>	212W01	
Initial Calib	oration ID: <u>12/05/</u>	06MSM				
	Anal	lyte	MDL	Method Blank	RL	Q
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	·	- Marian Marian III and Andrew Marian III an				•
				· · · · · · · · · · · · · · · · · · ·		
	Sur	rogate	Recovery	Control Limi	its Qualifier	
	4-Bromofluorob		97	82-124		_
	Dibromofluorom Toluene-d8 - SS		98 96	84-127 80-117		_
	Totalia do 25					
		Internal	l Standard	Qualifier		
		Fluorobenzene				
		Chlorobenzene-d5	•			
		1,4-Dichlorobenzene	e-d4			
Comments	:					

Analytical Method: SW8260	AAB#: <u>D0602003</u>	Print Balance (MASS & Million Control of Con
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1211W01LCS	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/11/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	12.9	129	27-158	
Chloromethane	10.0	10.9	109	51-137	
Vinyl chloride	10.0	11.0	110	57-137	
Bromomethane	10.0	10.9	109	44-156	
Chloroethane	10.0	10.6	106	60-140	
Trichlorofluoromethane	10.0	11.9	119	54-146	-
1,1-Dichloroethene	10.0	10.8	108	70-130	
Acetone	50.0	48.6	97	55-137	
Carbon disulfide	10.0	10.2	102	50-127	
Methylene chloride	10.0	9.9	99	73-121	
Iodomethane	10.0	9.5	95	50-150	E4
trans-1,2-Dichloroethene	10.0	9.6	96	74-124	
Tert-butylmethylether	10.0	9.9	99	75-119	
1,1-Dichloroethane	10.0	9.8	98	78-121	
Vinyl acetate	10.0	11.2	112	52-129	<b>E4</b>
2,2-Dichloropropane	10.0	9.9	99	61-137	
cis-1,2-Dichloroethene	10.0	10.0	100	80-118	
2-Butanone	50.0	49.7	99	76-122	
Bromochloromethane	10.0	9.7	97	82-118	
Chloroform	10.0	9.7	97	73-125	
1,1,1-Trichloroethane	10.0	9.8	98	76-124	
1,1-Dichloropropene	10.0	10.2	102	80-119	
Carbon tetrachloride	10.0	10.6	106	68-135	
Benzene	10.0	10.1	101	81-119	
1,2-Dichloroethane	10.0	9.7	97	75-122	
Trichloroethene	10.0	9.7	97	79-118	
1,2-Dichloropropane	10.0	9.6	96	82-115	
Dibromomethane	10.0	9.9	99	84-116	
Bromodichloromethane	10.0	10.4	104	81-122	
cis-1,3-Dichloropropene	10.0	10.4	104	78-118	
4-methyl-2-pentanone	50.0	50.9	102	81-127	
Toluene	10.0	9.9	99	83-116	
trans-1,3-Dichloropropene	10.0	10.5	105	73-122	

Comments:		
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Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical S	ervices/Redding
LCS ID: M1211W01LCS	Concentration Units (ug/L or mg/kg): UG/L
Date Extracted:	Date Analyzed: 12/11/06

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	10.0	100	83-120	
Tetrachloroethene	10.0	10.4	104	82-118	
1,3-Dichloropropane	10.0	10.0	100	82-119	
2-Hexanone	50.0	50.4	101	81-130	
Dibromochloromethane	10.0	11.3	113	79-124	
1,2-Dibromoethane	10.0	10.2	102	82-116	
Chlorobenzene	10.0	10.1	101	86-114	
1,1,1,2-Tetrachloroethane	10.0	10.5	105	79-122	
Ethylbenzene	10.0	10.4	104	86-116	
Xylene (total)	30.0	31.1	104	85-117	
Styrene	10.0	10.4	104	84-119	
Bromoform	10.0	11.2	112	71-133	
Isopropylbenzene	10.0	10.7	107	77-117	
1,1,2,2-Tetrachloroethane	10.0	9.8	98	80-117	
Bromobenzene	10.0	10.1	101	84-120	
1,2,3-Trichloropropane	10.0	9.6	96	81-122	E4
n-Propylbenzene	10.0	10.2	102	87-117	
2-Chlorotoluene	10.0	10.1	101	87-119	
1,3,5-Trimethylbenzene	10.0	10.3	103	83-120	
4-Chlorotoluene	10.0	10.1	101	86-118	
tert-Butylbenzene	10.0	9.0	90	82-122	
1,2,4-Trimethylbenzene	10.0	10.6	106	86-121	
sec-Butylbenzene	10.0	11.0	110	84-128	
1,3-Dichlorobenzene	10.0	10.1	101	85-119	
p-Isopropyltoluene	10.0	10.4	104	84-121	
1,4-Dichlorobenzene	10.0	10.2	102	84-118	
n-Butylbenzene	10.0	10.2	102	81-123	
1,2-Dichlorobenzene	10.0	10.2	102	85-117	
1,2-Dibromo-3-chloropropane	40.0	39.7	99	67-121	
1,2,4-Trichlorobenzene	10.0	9.5	95	69-128	
Hexachlorobutadiene	10.0	10.0	100	71-135	
Naphthalene	10.0	10.2	102	60-131	
1,2,3-Trichlorobenzene	10.0	9.2	92	69-130	

Comments:			

Analytica	Method: SW826	50	AAF	B#: <u>D06</u>	02003		
Lab Name	e: Columbia Ana	alytical Services/Red	ding				
LCS ID:	M1211W01LCS	Conce	ntration Units (	(ug/L or n	ng/kg): UG/L		
_		Date An		_			
			ury 200	, , ,			
Illitiai Cai	ibration ID: 12/0		T T				
<b></b>	Analyte		Expected	Found	%R	Control Limits	, Q
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		Manager 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1					
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	Sur	rogate	Recover	у	Control Limits	Qualifier	
	4-Bromofluorob		102		82-124		
	Dibromofluoron Toluene-d8 - SS		101		84-127 80-117		
	Toluche-do - 55		102		00-117		
	· · · · · · · · · · · · · · · · · · ·					<b>1</b> .	
			al Standard	<del>-, -, -,</del>	Qualifier	4	
		Fluorobenzene Chlorobenzene-d5		·		-	
	1,4-Dichlorobenzene-d4				1		
	'				· · · · · · · · · · · · · · · · · · ·	<b></b>	
Comment	s:						
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Analytical Method: SW8260	AAB #: <u>D0602003</u>	
Lab Name: Columbia Analytical S	ervices/Redding	
LCS ID: M1211W01LCSD	Concentration Units (ug/L or mg/kg): UG/L	
Date Extracted:	Date Analyzed: 12/11/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	12.6	126	27-158	
Chloromethane	10.0	10.6	106	51-137	
Vinyl chloride	10.0	10.8	108	57-137	
Bromomethane	10.0	11.2	112	44-156	
Chloroethane	10.0	10.9	109	60-140	
Trichlorofluoromethane	10.0	12.0	120	54-146	·
1,1-Dichloroethene	10.0	11.1	111	70-130	
Acetone	50.0	45.4	91	55-137	
Carbon disulfide	10.0	10.2	102	50-127	
Methylene chloride	10.0	9.6	96	73-121	
Iodomethane	10.0	9.5	95	50-150	<b>E4</b>
trans-1,2-Dichloroethene	10.0	9.7	97	74-124	
Tert-butylmethylether	10.0	9.9	99	75-119	
1,1-Dichloroethane	10.0	9.7	97	78-121	
Vinyl acetate	10.0	11.1	111	52-129	E4
2,2-Dichloropropane	10.0	10.0	100	61-137	
cis-1,2-Dichloroethene	10.0	10.2	102	80-118	
2-Butanone	50.0	49.0	98	76-122	
Bromochloromethane	10.0	9.8	98	82-118	
Chloroform	10.0	9.6	96	73-125	
1,1,1-Trichloroethane	10.0	9.9	99	76-124	
1,1-Dichloropropene	10.0	10.2	102	80-119	
Carbon tetrachloride	10.0	10.7	107	68-135	
Benzene	10.0	10.0	100	81-119	
1,2-Dichloroethane	10.0	9.6	96	75-122	
Trichloroethene	10.0	9.9	99	79-118	
1,2-Dichloropropane	10.0	9.6	96	82-115	
Dibromomethane	10.0	9.9	99	84-116	
Bromodichloromethane	10.0	10.5	105	81-122	
cis-1,3-Dichloropropene	10.0	10.3	103	78-118	
4-methyl-2-pentanone	50.0	51.4	103	81-127	
Toluene	10.0	9.7	97	83-116	
trans-1,3-Dichloropropene	10.0	10.4	104	73-122	

Comments:		
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Analytical Method: SW8260	AAB #:	· ·
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1211W01LCSD	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/11/06	
Initial Calibration ID: 12/05/06MSM		

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	9.9	99	83-120	
Tetrachloroethene	10.0	10.2	102	82-118	
1,3-Dichloropropane	10.0	9.9	99	82-119	
2-Hexanone	50.0	50.1	100	81-130	
Dibromochloromethane	10.0	11.1	111	79-124	
1,2-Dibromoethane	10.0	10.0	100	82-116	
Chlorobenzene	10.0	10.0	100	86-114	·
1,1,1,2-Tetrachloroethane	10.0	10.4	104	79-122	
Ethylbenzene	10.0	10.2	102	86-116	
Xylene (total)	30.0	30.3	101	85-117	
Styrene	10.0	10.2	102	84-119	
Bromoform	10.0	10.7	107	71-133	
Isopropylbenzene	10.0	10.4	104	77-117	
1,1,2,2-Tetrachloroethane	10.0	10.1	101	80-117	
Bromobenzene	10.0	9.9	99	84-120	-
1,2,3-Trichloropropane	10.0	9.7	97	81-122	E4
n-Propylbenzene	10.0	10.1	101	87-117	
2-Chlorotoluene	10.0	10.0	100	87-119	
1,3,5-Trimethylbenzene	10.0	10.0	100	83-120	
4-Chlorotoluene	10.0	9.9	99	86-118	
tert-Butylbenzene	10.0	8.7	87	82-122	
1,2,4-Trimethylbenzene	10.0	10.1	101	86-121	
sec-Butylbenzene	10.0	10.6	106	84-128	
1,3-Dichlorobenzene	10.0	9.8	98	85-119	
p-Isopropyltoluene	10.0	10.1	101	84-121	
1,4-Dichlorobenzene	10.0	9.9	99	84-118	
n-Butylbenzene	10.0	9.9	99	81-123	
1,2-Dichlorobenzene	10.0	9.9	99	85-117	
1,2-Dibromo-3-chloropropane	40.0	39.8	100	67-121	
1,2,4-Trichlorobenzene	10.0	9.7	97	69-128	
Hexachlorobutadiene	10.0	9.9	99	71-135	
Naphthalene	10.0	10.3	103	60-131	
1,2,3-Trichlorobenzene	10.0	9.5	95	69-130	

Comments:			
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Analytica	l Method: SW82	60	AAE	#: <u>D060</u>	2003		
Lab Name	e: Columbia An	alytical Services/Red	ding				
LCS ID:	M1211W01LCSI	O Concer	ntration Units (	ug/L or m	g/kg): <u>UG/L</u>		
Date Extra	acted:	Date An	alyzed: 12/11	/06			
Initial Cal	ibration ID: 12/0	05/06MSM					
	Analyte		Expected	Found	%R	Control Limits	Q
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	Sur	rogate	Recover	v C	Control Limits	Qualifier	v v
	4-Bromofluorob		98		82-124		
	Dibromofluoron		101		84-127		
	Toluene-d8 - SS	)	101		80-117		
		Fluorobenzene	al Standard		Qualifier		
		Chlorobenzene-d5					
		1,4-Dichlorobenzer	ne-d4				
Commont							
Comment	<b>3.</b>						······································
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Analytical Method: SW8260	AAB #:	
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1212W01LCS	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/12/06	
Initial Calibration ID: <u>12/05/06MSM</u>	<u> </u>	

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	11.9	119	27-158	
Chloromethane	10.0	10.8	108	51-137	
Vinyl chloride	10.0	10.5	105	57-137	
Bromomethane	10.0	11.1	111	44-156	
Chloroethane	10.0	10.6	106	60-140	
Trichlorofluoromethane	10.0	10.8	108	54-146	
1,1-Dichloroethene	10.0	10.8	108	70-130	
Acetone	50.0	45.9	92	55-137	
Carbon disulfide	10.0	10.0	100	50-127	
Methylene chloride	10.0	9.8	98	73-121	
Iodomethane	10.0	9.3	93	50-150	E4
trans-1,2-Dichloroethene	10.0	9.5	95	74-124	
Tert-butylmethylether	10.0	9.8	98	75-119	
1,1-Dichloroethane	10.0	9.6	96	78-121	
Vinyl acetate	10.0	10.8	108	52-129	E4
2,2-Dichloropropane	10.0	10.0	100	61-137	
cis-1,2-Dichloroethene	10.0	10.1	101	80-118	
2-Butanone	50.0	47.8	96	76-122	
Bromochloromethane	10.0	9.5	95	82-118	
Chloroform	10.0	~ 9.4	94	73-125	-
1,1,1-Trichloroethane	10.0	9.6	96	76-124	
1,1-Dichloropropene	10.0	9.8	98	80-119	
Carbon tetrachloride	10.0	9.6	96	68-135	
Benzene	10.0	10.0	100	81-119	
1,2-Dichloroethane	10.0	9.6	96	75-122	
Trichloroethene	10.0	9.7	97	79-118	
1,2-Dichloropropane	10.0	9.6	96	82-115	
Dibromomethane	10.0	9.9	99	84-116	
Bromodichloromethane	10.0	9.7	97	81-122	
cis-1,3-Dichloropropene	10.0	10.1	101	78-118	
4-methyl-2-pentanone	50.0	49.1	98	81-127	
Toluene	10.0	9.5	95	83-116	
trans-1,3-Dichloropropene	10.0	9.8	98	73-122	

Comments:		

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Ser	vices/Redding
LCS ID: M1212W01LCS	Concentration Units (ug/L or mg/kg): UG/L
Date Extracted:	Date Analyzed: 12/12/06

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	9.8	98	83-120	
Tetrachloroethene	10.0	10.0	100	82-118	
1,3-Dichloropropane	10.0	9.8	98	82-119	
2-Hexanone	50.0	47.0	94	81-130	
Dibromochloromethane	10.0	9.6	96	79-124	
1,2-Dibromoethane	10.0	9.8	98	82-116	
Chlorobenzene	10.0	9.8	98	86-114	
1,1,1,2-Tetrachloroethane	10.0	9.5	95	79-122	
Ethylbenzene	10.0	10.0	100	86-116	
Xylene (total)	30.0	29.5	98	85-117	
Styrene	10.0	10.0	100	84-119	
Bromoform	10.0	9.0	90	71-133	
Isopropylbenzene	10.0	10.2	102	77-117	
1,1,2,2-Tetrachloroethane	10.0	9.6	96	80-117	
Bromobenzene	10.0	9.9	99	84-120	
1,2,3-Trichloropropane	10.0	9.6	96	81-122	E4
n-Propylbenzene	10.0	10.1	101	87-117	
2-Chlorotoluene	10.0	10.1	101	87-119	
1,3,5-Trimethylbenzene	10.0	10.1	101	83-120	
4-Chlorotoluene	10.0	10.0	100	86-118	
tert-Butylbenzene	10.0	8.7	87	82-122	
1,2,4-Trimethylbenzene	10.0	10.2	102	86-121	
sec-Butylbenzene	10.0	10.6	106	84-128	
1,3-Dichlorobenzene	10.0	9.9	99	85-119	
p-Isopropyltoluene	10.0	10.1	101	84-121	
1,4-Dichlorobenzene	10.0	9.9	99	84-118	
n-Butylbenzene	10.0	9.8	98	81-123	
1,2-Dichlorobenzene	10.0	10.0	100	85-117	
1,2-Dibromo-3-chloropropane	40.0	35.8	90	67-121	
1,2,4-Trichlorobenzene	10.0	9.5	95	69-128	
Hexachlorobutadiene	10.0	9.8	98	71-135	
Naphthalene	10.0	9.7	97	60-131	
1,2,3-Trichlorobenzene	10.0	9.2	92	69-130	

Comments:		
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Analytical Method: SW8260 AAB #: D0602003									
Lab Name	Lab Name: Columbia Analytical Services/Redding								
LCS ID:	LCS ID: M1212W01LCS Concentration Units (ug/L or mg/kg): UG/L								
Date Extra	acted:	Date Ana							
	ibration ID: _12/0								
	Analyte	2	Expected	Found	%R	Control Limits	Q		
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•	Sur	rogate	Recovery		Control Limits	Qualifier			
	4-Bromofluorob	······	102		82-124				
	Dibromofluoron Toluene-d8 - SS		98		84-127 80-117				
	Tolucile-do - 33		76		80-117				
l		Interna	al Standard		Qualifier	<u> </u>			
		Fluorobenzene							
		Chlorobenzene-d5							
1,4-Dichlorobenzene			ne-d4		OCCUPANT SECTEMBRISHER AND ADDRESS AND ADD				
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Analytical Method: SW8260	AAB #:	
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1212W01LCSD	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/12/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	12.8	128	27-158	
Chloromethane	10.0	11.3	113	51-137	
Vinyl chloride	10.0	11.1	111	57-137	
Bromomethane	10.0	11.4	114	44-156	
Chloroethane	10.0	11.3	113	60-140	
Trichlorofluoromethane	10.0	11.9	119	54-146	
1,1-Dichloroethene	10.0	10.8	108	70-130	
Acetone	50.0	49.9	100	55-137	
Carbon disulfide	10.0	10.2	102	50-127	
Methylene chloride	10.0	10.0	100	73-121	
Iodomethane	10.0	9.4	94	50-150	E4
trans-1,2-Dichloroethene	10.0	9.8	98	74-124	
Tert-butylmethylether	10.0	9.9	99	75-119	
1,1-Dichloroethane	10.0	9.8	98	78-121	
Vinyl acetate	10.0	10.8	108	52-129	E4
2,2-Dichloropropane	10.0	10.0	100	61-137	
cis-1,2-Dichloroethene	10.0	10.3	103	80-118	
2-Butanone	50.0	50.8	102	76-122	
Bromochloromethane	10.0	10.0	100	82-118	
Chloroform	10.0	9.7	97	73-125	
1,1,1-Trichloroethane	10.0	9.8	98	76-124	
1,1-Dichloropropene	10.0	10.1	101	80-119	
Carbon tetrachloride	10.0	10.0	100	68-135	
Benzene	10.0	10.1	101	81-119	
1,2-Dichloroethane	10.0	9.9	99	75-122	
Trichloroethene	10.0	9.9	99	79-118	
1,2-Dichloropropane	10.0	9.8	98	82-115	
Dibromomethane	10.0	10.0	100	84-116	
Bromodichloromethane	10.0	10.0	100	81-122	7
cis-1,3-Dichloropropene	10.0	10.4	104	78-118	
4-methyl-2-pentanone	50.0	52.5	105	81-127	
Toluene	10.0	9.8	98	83-116	
trans-1,3-Dichloropropene	10.0	9.9	99	73-122	

Comments:	

Analytical Method: SW8260	AAB #: <u>D0602003</u>	
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1212W01LCSD	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/12/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	9.3	93	83-120	
Tetrachloroethene	10.0	10.1	101	82-118	
1,3-Dichloropropane	10.0	10.0	100	82-119	
2-Hexanone	50.0	50.8	102	81-130	
Dibromochloromethane	10.0	9.9	99	79-124	
1,2-Dibromoethane	10.0	10.1	101	82-116	
Chlorobenzene	10.0	10.0	100	86-114	
1,1,1,2-Tetrachloroethane	10.0	9.8	98	79-122	
Ethylbenzene	10.0	10.1	101	86-116	
Xylene (total)	30.0	30.2	101	85-117	
Styrene	10.0	10.3	103	84-119	
Bromoform	10.0	9.6	96	71-133	
Isopropylbenzene	10.0	10.4	104	77-117	
1,1,2,2-Tetrachloroethane	10.0	10.0	100	80-117	
Bromobenzene	10.0	10.1	101	84-120	
1,2,3-Trichloropropane	10.0	9.8	98	81-122	E4
n-Propylbenzene	10.0	10.0	100	87-117	
2-Chlorotoluene	10.0	10.1	101	87-119	
1,3,5-Trimethylbenzene	10.0	9.9	99	83-120	
4-Chlorotoluene	10.0	10.0	100	86-118	
tert-Butylbenzene	10.0	8.9	89	82-122	
1,2,4-Trimethylbenzene	10.0	10.2	102	86-121	
sec-Butylbenzene	10.0	10.6	106	84-128	
1,3-Dichlorobenzene	10.0	10.0	100	85-119	
p-Isopropyltoluene	10.0	10.1	101	84-121	
1,4-Dichlorobenzene	10.0	10.0	100	84-118	
n-Butylbenzene	10.0	9.8	98	81-123	
1,2-Dichlorobenzene	10.0	9.9	99	85-117	
1,2-Dibromo-3-chloropropane	40.0	37.8	94	67-121	
1,2,4-Trichlorobenzene	10.0	9.2	92	69-128	
Hexachlorobutadiene	10.0	9.6	96	71-135	
Naphthalene	10.0	9.7	97	60-131	
1,2,3-Trichlorobenzene	10.0	8.9	89	69-130	

Comments:		

Analytica	Method: SW82	60	AAE	8 #: <u>D060</u>	2003				
Lab Name	Lab Name: Columbia Analytical Services/Redding								
LCS ID:	LCS ID: M1212W01LCSD Concentration Units (ug/L or mg/kg): UG/L								
	Date Extracted: Date Analyzed: 12/12/06								
	Initial Calibration ID: _12/05/06MSM								
			Expected	Found	%R	Control Limits	T 0		
	Analyte			Found	70K	Control Limits	Q		
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				· ·		· · ·			
-		rogate	Recovery		Control Limits	Qualifier			
	4-Bromofluorob  Dibromofluoron		99		82-124 84-127				
	Toluene-d8 - SS		99		80-117				
-	100								
		Interna	ıl Standard	·	Qualifier				
		Fluorobenzene							
Chlorobenzene-d5			14 .						
	1,4-Dichlorobenzene-d4					,			
Comment	s:								
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Analytical Method: SW8260	AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	%Solids:
Parent Field Sample ID: M1211W01 B	MINIMALI CS BSD ID: MINIMALI CSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Dichlorodifluoromethane		10.0	12.9	129	12.6	126	2	20	27-158	
Chloromethane		10.0	10.9	109	10.6	106	3	20	51-137	
Vinyl chloride		10.0	11.0	110	10.8	108	2	20	57-137	
Bromomethane		10.0	10.9	109	11.2	112	3	20	44-156	
Chloroethane		10.0	10.6	106	10.9	109	3	20	60-140	
Trichlorofluoromethane		10.0	11.9	119	12.0	120	1	20	54-146	
1,1-Dichloroethene		10.0	10.8	108	11.1	111	3	20	70-130	
Acetone		50.0	48.6	97	45.4	91	7	20	55-137	
Carbon disulfide		10.0	10.2	102	10.2	102	0	20	50-127	
Methylene chloride		10.0	9.9	99	9.6	96	3	20	73-121	
lodomethane		10.0	9.5	95	9.5	95	0	20	50-150	<b>E4</b>
trans-1,2-Dichloroethene		10.0	9.6	96	9.7	97	1	20	74-124	
Tert-butylmethylether		10.0	9.9	99	9.9	99	0	20	75-119	
1,1-Dichloroethane		10.0	9.8	98	9.7	97	1	20	78-121	
Vinyl acetate		10.0	11.2	112	11.1	111	1	20	52-129	<b>E4</b>
2,2-Dichloropropane		10.0	9.9	99	10.0	100	1	20	61-137	
cis-1,2-Dichloroethene		10.0	10.0	100	10.2	102	2	20	80-118	
2-Butanone	-	50.0	49.7	99	49.0	98	1	20	76-122	
Bromochloromethane		10.0	9.7	97	9.8	98	1	20	82-118	
Chloroform		10.0	9.7	97	9.6	96	1	20	73-125	
1,1,1-Trichloroethane		10.0	9.8	98	9.9	99	1	20	76-124	
1,1-Dichloropropene		10.0	10.2	102	10.2	102	0	20	80-119	
Carbon tetrachloride		10.0	10.6	106	10.7	107	1	20	68-135	***************************************
Benzene		10.0	10.1	101	10.0	100	1	20	81-119	
1,2-Dichloroethane		10.0	9.7	97	9.6	96	1	20	75-122	
Trichloroethene		10.0	9.7	97	9.9	99	2	20	79-118	

Comments:		
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Analytical Method: SW8260	,	AAB #:D0602003	3		
Lab Name: Columbia Analytical Services/Reddin	ıg				
Concentration Units (ug/L or mg/kg): UG/L		_	%Solids:	P	
Parent Field Sample ID: M1211W01	BS ID:	M1211W01LCS	BSD ID:	M1211W01LCSD	

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
1,2-Dichloropropane		10.0	9.6	96	9.6	96	0	20	82-115	
Dibromomethane		10.0	9.9	99	9.9	99	0	20	84-116	
Bromodichloromethane		10.0	10.4	104	10.5	105	1	20	81-122	
cis-1,3-Dichloropropene		10.0	10.4	104	10.3	103	1	20	78-118	
4-methyl-2-pentanone		50.0	50.9	102	51.4	103	1	20	81-127	
Toluene		10.0	9.9	99	9.7	97	2	20	83-116	
trans-1,3-Dichloropropene		10.0	10.5	105	10.4	104	1	20	73-122	
1,1,2-Trichloroethane		10.0	10.0	100	9.9	99	1	20	83-120	
Tetrachloroethene		10.0	10.4	104	10.2	102	2	20	82-118	
1,3-Dichloropropane		10.0	10.0	100	9.9	99	1	20	82-119	
2-Hexanone		50.0	50.4	101	50.1	100	0	20	81-130	
Dibromochloromethane		10.0	11.3	113	11.1	111	2	20	79-124	
1,2-Dibromoethane		10.0	10.2	102	10.0	100	2	20	82-116	-
Chlorobenzene		10.0	10.1	101	10.0	100	1	20	86-114	
1,1,1,2-Tetrachloroethane		10.0	10.5	105	10.4	104	1	20	79-122	
Ethylbenzene		10.0	10.4	104	10.2	102	2	20	86-116	
Xylene (total)		30.0	31.1	104	30.3	101	3	20	85-117	
Styrene		10.0	10.4	104	10.2	102	2	20	84-119	
Bromoform		10.0	11.2	112	10.7	107	4	20	71-133	
lsopropylbenzene		10.0	10.7	107	10.4	104	3	20	77-117	
1,1,2,2-Tetrachloroethane		10.0	9.8	98	10.1	101	3	20	80-117	
Bromobenzene		10.0	10.1	101	9.9	99	2	20	84-120	-
1,2,3-Trichloropropane		10.0	9.6	96	9.7	97	1	20	81-122	E4
n-Propylbenzene		10.0	10.2	102	10.1	101	1	20	87-117	
2-Chlorotoluene		10.0	10.1	101	10.0	100	1	20	87-119	
1,3,5-Trimethylbenzene		10.0	10.3	103	10.0	100	3	20	83-120	

Comments:			
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Analytical Method: SW826	50		A	AAB#:	D0602003	3					
Lab Name: Columbia Ana	llytical Serv	vices/Redo	ling			•					
Concentration Units (ug/L o	r mg/kg):	UG/L		-		%Soli	ds:				
Parent Field Sample ID: MI	211W01	<del></del>	BS ID:	M1211	W01LCS	<del></del>	BSD II	D: <u>M1211</u>	W01LCSI	<u>)</u>	
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q	
Chlorotoluene		10.0	10.1	101	9.9	99	2	20	86-118		
rt-Butylbenzene		10.0	9.0	90	8.7	87	3	20	82-122	<del></del>	
2,4-Trimethylbenzene		10.0	10.6	106	10.1	101	5	20	86-121		
c-Butylbenzene		10.0	11.0	110	10.6	106	4	20	84-128		_
3-Dichlorobenzene		10.0	10.1	101	9.8	98	3	20	85-119		_
Isopropyltoluene		10.0	10.4	104	10.1	101	3	20	84-121		
4-Dichlorobenzene		10.0	10.2	102	9.9	99	3	20	84-118		
Butylbenzene		10.0	10.2	102	9.9	99	3	20	81-123	<u>, , , , , , , , , , , , , , , , , , , </u>	
2-Dichlorobenzene		10.0	10.2	102	9.9	99	3	20	85-117		
2-Dibromo-3-chloropropane		40.0	39.7	99	39.8	100	0	20	67-121		
2,4-Trichlorobenzene		10.0	9.5	95	9.7	97	2	20	69-128		
exachlorobutadiene		10.0	10.0	100	9.9	99	1	20	71-135		
aphthalene		10.0	10.2	102	10.3	103	1	20	60-131		
2,3-Trichlorobenzene		10.0	9.2	92	9.5	95	3	20	69-130	***************************************	
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Comments:											

Analytical Method: SW8260	AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical Services/Rede	ling
Concentration Units (ug/L or mg/kg): UG/L	%Solids:
Parent Field Sample ID: M1212W01	BS ID: M1212W01LCS BSD ID: M1212W01LCSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Dichlorodifluoromethane		10.0	11.9	119	12.8	128	7	20	27-158	
Chloromethane		10.0	10.8	108	11.3	113	4	20	51-137	
Vinyl chloride		10.0	10.5	105	11.1	111	6	20	57-137	·
Bromomethane		10.0	11.1	111	11.4	114	3	20	44-156	
Chloroethane		10.0	10.6	106	11.3	113	6	20	60-140	
Trichlorofluoromethane		10.0	10.8	108	11.9	119	10	20	54-146	
1,1-Dichloroethene		10.0	10.8	108	10.8	108	0	20	70-130	
Acetone		50.0	45.9	92	49.9	100	8	20	55-137	
Carbon disulfide		10.0	10.0	100	10.2	102	2	20	50-127	
Methylene chloride		10.0	9.8	98	10.0	100	2	20	73-121	
lodomethane		10.0	9.3	93	9.4	94	1	20	50-150	E4
trans-1,2-Dichloroethene		10.0	9.5	95	9.8	98	3	20	74-124	
Tert-butylmethylether		10.0	9.8	98	9.9	99	1	20	75-119	
1,1-Dichloroethane		10.0	9.6	96	9.8	98	2	20	78-121	:
Vinyl acetate		10.0	10.8	108	10.8	108	0	20	52-129	E4
2,2-Dichloropropane		10.0	10.0	100	10.0	100	0	20	61-137	
cis-1,2-Dichloroethene		10.0	10.1	101	10.3	103	2	20	80-118	
2-Butanone		50.0	47.8	96	50.8	102	6	20	76-122	
Bromochloromethane		10.0	9.5	95	10.0	100	5	20	82-118	
Chloroform		10.0	9.4	94	9.7	97	3	20	73-125	
1,1,1-Trichloroethane		10.0	9.6	96	9.8	98	2	20	76-124	
1,1-Dichloropropene		10.0	9.8	98	10.1	101	3	20	80-119	
Carbon tetrachloride		10.0	9.6	96	10.0	100	4	20	68-135	
Benzene		10.0	10.0	100	10.1	101	1	20	81-119	
1,2-Dichloroethane		10.0	9.6	96	9.9	99	3	20	75-122	
Trichloroethene		10.0	9.7	97	9.9	99	2	20	79-118	

Comments:		
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Analytical Method: SW8260	AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical Services/Redding	·
Concentration Units (ug/L or mg/kg): UG/L	%Solids:
Parent Field Sample ID: M1212W01 RS	D. M1212W01LCS RSD ID: M1212W01LCSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
1,2-Dichloropropane		10.0	9.6	96	9.8	98	2	20	82-115	
Dibromomethane		10.0	9.9	99	10.0	100	1	20	84-116	
Bromodichloromethane		10.0	9.7	97	10.0	100	3	20	81-122	
cis-1,3-Dichloropropene		10.0	10.1	101	10.4	104	3	20	78-118	
4-methyl-2-pentanone		50.0	49.1	98	52.5	105	7	20	81-127	
Toluene		10.0	9.5	95	9.8	98	3	20	83-116	
trans-1,3-Dichloropropene		10.0	9.8	98	9.9	99	1	20	73-122	
1,1,2-Trichloroethane		10.0	9.8	98	9.3	93	5	20	83-120	
Tetrachloroethene	-	10.0	10.0	100	10.1	101	1	20	82-118	-
1,3-Dichloropropane		10.0	9.8	98	10.0	100	2	20	82-119	
2-Hexanone		50.0	47.0	94	50.8	102	8	20	81-130	
Dibromochloromethane		10.0	9.6	96	9.9	99	3	20	79-124	
1,2-Dibromoethane		10.0	9.8	98	10.1	101	3	20	82-116	
Chlorobenzene		10.0	9.8	98	10.0	100	2	20	86-114	
1,1,1,2-Tetrachloroethane		10.0	9.5	95	9.8	98	3	20	79-122	
Ethylbenzene		10.0	10.0	100	10.1	101	1	20	86-116	
Xylene (total)		30.0	29.5	98	30.2	101	2	20	85-117	
Styrene		10.0	10.0	100	10.3	103	3	20	84-119	
Bromoform		10.0	9.0	90	9.6	96	6	20	71-133	
lsopropylbenzene		10.0	10.2	102	10.4	104	2	20	77-117	
1,1,2,2-Tetrachloroethane		10.0	9.6	96	10.0	100	4	20	80-117	
Bromobenzene		10.0	9.9	99	10.1	101	2	20	84-120	
1,2,3-Trichloropropane		10.0	9.6	96	9.8	98	2	20	81-122	E4
n-Propylbenzene		10.0	10.1	101	10.0	100	1	20	87-117	
2-Chlorotoluene		10.0	10.1	101	10.1	101	0	20	87-119	
1,3,5-Trimethylbenzene		10.0	10.1	101	9.9	99	2	20	83-120	

Comments:	

Analytical Method: SW826	0		A	AAB#:	D0602003	3				
Lab Name: Columbia Ana	lytical Ser	vices/Redo	ling							
Concentration Units (ug/L or	r mg/kg):	UG/L		-		%Soli	ds:			
Parent Field Sample ID: M1	212W01		BS ID:	M1212	W01LCS	-	BSD II	D: <u>M1212</u>	W01LCSI	<u>D</u>
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
4-Chlorotoluene		10.0	10.0	100	10.0	100	0	20	86-118	
tert-Butylbenzene		10.0	8.7	87	8.9	89	2	20	82-122	
1,2,4-Trimethylbenzene		10.0	10.2	102	10.2	102	0	20	86-121	
sec-Butylbenzene		10.0	10.6	106	10.6	106	0	20	84-128	
1,3-Dichlorobenzene		10.0	9.9	99	10.0	100	1	20	85-119	
p-lsopropyltoluene		10.0	10.1	101	10.1	101	0	20	84-121	
1,4-Dichlorobenzene		10.0	9.9	99	10.0	100	1	20	84-118	
n-Butylbenzene		10.0	9.8	98	9.8	98	0	20	81-123	
1,2-Dichlorobenzene		10.0	10.0	100	9.9	99	1	20	85-117	
1,2-Dibromo-3-chloropropane		40.0	35.8	90	37.8	94	5	20	67-121	
1,2,4-Trichlorobenzene		10.0	9.5	95	9.2	92	3	20	69-128	
Hexachlorobutadiene		10.0	9.8	98	9.6	96	2	20	71-135	
Naphthalene		10.0	9.7	97	9.7	97	0	20	60-131	
1,2,3-Trichlorobenzene		10.0	9.2	92	8.9	89	3	20	69-130	-
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Comments:										

# ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: SW8260	AAB #:	D0602003	
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Lab Name: Columbia Analytical Services/Redding			
Instrument ID #: MSM DB-624			

Field Sample ID/Std ID/	Laboratory	Date Analysis	Time Analysis	Date Analysis	Time Analysis
Blank ID/QC Sample ID	File ID	Started	Started	Completed	Completed
VSTD00.5	M065370	12/05/06	1545	12/05/06	1605
VSTD001	M065371	12/05/06	1606	12/05/06	1626
VSTD005	M065372	12/05/06	1628	12/05/06	1648
VSTD010	M065373	12/05/06	1649	12/05/06	1709
VSTD020	M065374	12/05/06	1711	12/05/06	1731
VSTD050	M065375	12/05/06	1732	12/05/06	1752
VSTD100	M065376	12/05/06	1754	12/05/06	1814
VSTD150	M065377	12/05/06	1815	12/05/06	1835
QCALTSTD4	M065380	12/05/06	1920	12/05/06	1940
VSTD10M	M065436	12/11/06	1044	12/11/06	1104
M1211W01LCS	M065437	12/11/06	1106	12/11/06	1126
M1211W01LCSD	M065438	12/11/06	1127	12/11/06	1147
M1211W01	M065441	12/11/06	1232	12/11/06	1252
ASE-106A-6D2	M065442	12/11/06	1253	12/11/06	1313
ASE-107A-6D2	M065443	12/11/06	1314	12/11/06	1334
ASE-113A-6D2	M065445	12/11/06	1357	12/11/06	1417
ASE-114A-6D2	M065446	12/11/06	1419	12/11/06	1439
ASE-122A-6D2	M065447	12/11/06	1440	12/11/06	1500
ASE-124A-6D2	M065448	12/11/06	1502	12/11/06	1522
ASE-125A-6D2	M065449	12/11/06	1523	12/11/06	1543
ASE-128A-6D2	M065450	12/11/06	1544	12/11/06	1604
ASE-95A-6D2	M065451	12/11/06	1606	12/11/06	1626
ASE-96A-6D2	M065452	12/11/06	1627	12/11/06	1647
ASE-98A-6D2	M065453	12/11/06	1649	12/11/06	1709
ASE-99A-6D2	M065454	12/11/06	1710	12/11/06	1730
PL-501-6D2	M065455	12/11/06	1732	12/11/06	1752

Comments:				
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# ORGANIC ANALYSES DATA SHEET. 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: SW8260		AAB #:	AAB #:D0602003		
Lab Name: Columbia Analy	vtical Services/Redding				
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Instrument ID #: MSM	DB-624	<del></del>			
Field Sample ID/Std ID/	Laboratory	Date Analysis	Time Analysis	Date Analysis	Time Analysis
Blank ID/QC Sample ID	File ID	Started	Started	Completed	Completed
PL-502-6D2	M065456	12/11/06	1753	12/11/06	1813
ASE-109A-6D2	M065457	12/11/06	1815	12/11/06	1835
ASE-123A-6D2	M065458	12/11/06	1836	12/11/06	1856
ASE-106A-6D2DL	M065459	12/11/06	1858	12/11/06	1918
TB-120606	M065462	12/11/06	2002	12/11/06	2022
VSTD10M	M065468	12/12/06	0928	12/12/06	0948
M1212W01LCSD	M065470	12/12/06	1015	12/12/06	1035
M1212W01LCS	M065472	12/12/06	1058	12/12/06	1118
M1212W01	M065474	12/12/06	1141	12/12/06	1201
ASE-95A-6D2DL	M065475	12/12/06	1203	12/12/06	1223
ASE-96A-6D2DL	M065476	12/12/06	1224	12/12/06	1244
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Comments:					

# ORGANIC ANALYSES DATA SHEET APPENDIX A SURROGATE RESULTS

Analytical Method: SW8260	AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical Services/Redding	
Matrix: Water	

Field/QC Sample ID	S1	S2	S3	S4	S5	S6	S7	S8	Q
M1211W01LCS	102	101	102						
M1211W01LCSD	98	101	101						
M1211W01	100	98	99						
ASE-106A-6D2	100	100	100						
ASE-107A-6D2	99	99	98						
ASE-113A-6D2	99	98	99						
ASE-114A-6D2	98	98	99						
ASE-122A-6D2	100	100	100				-		
ASE-124A-6D2	98	100	99						
ASE-125A-6D2	99	99	99						
ASE-128A-6D2	101	99	99						
ASE-95A-6D2	101	96	100						
ASE-96A-6D2	100	100	101						
ASE-98A-6D2	101	98	100						
ASE-99A-6D2	98	98	98						
PL-501-6D2	99	98	100						
PL-502-6D2	101	99	100						
ASE-109A-6D2	100	101	100						
ASE-123A-6D2	100	98	99						
ASE-106A-6D2DL	102	101	100						
TB-120606	100	99	100						
M1212W01LCSD	99	100	99						
M1212W01LCS	102	100	98						
M1212W01	97	98	96						
ASE-95A-6D2DL	98	95	96						
ASE-96A-6D2DL	98	98	95						

S1:	4-Bromofluorobenzene - SS	82-124
S2:	Dibromofluoromethane - SS	84-127
S3:	Toluene-d8 - SS	80-117

Comments:		

# HPLC POLYNUCLEAR AROMATIC HYDROCARBONS

## ORGANIC ANALYSES DATA PACKAGE

Analytical Method	1: <u>SW8310</u>	· A.	AB #: <u>D0602003</u>		
Lab Name: Colu	mbia Analytical Services/Redding				
Base/Command: _	ARIZONA DELIVERABLES				
Project: Sky H	Iarbor				
	Field Sample ID		Lab Sample ID		
	ASE 100 A 6D0		D0602002 005		
	ASE-122A-6D2 ASE-124A-6D2		D0602003-005 D0602003-006		
	ASE-125A-6D2		D0602003-007		
	ASE-128A-6D2		D0602003-008		
	PL-502-6D2		D0602003-014		
	ASE-123A-6D2		D0602003-017		
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Comments:					
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completeness, for and in the comput	package is in compliance with the to other than the conditions detailed a er-readable data submitted on diske ee, as verified by the following sign	bove. Releas tte has been a	e of the data contained in thi	is hardcopy data p	
C			S. I. Ja Olina		
Signature:		Name:	Sylvia Chen		
Date: 12	120/06	Title:	Sylvia Chen Scientist		

Analytical Method: SW8310	Preparatory Method:	SW3520 AAB	#: D0602003
Lab Name: Columbia Analytical Services/F	Redding		
Field Sample ID: ASE-122A-6D2	Lab Sample ID:	D0602003-005 Matri	x: Water
% Solids:		Initial Calibration	ID: <u>11/02/06LCI</u>
Date Received: 12/08/06 Date	e Extracted: 12/11/06	Date Analyzed:	12/14/06
Concentration Units (ug/L or ug/Kg dry weig	ht): UG/L	Sample Volume: 1.0:	50 L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.048	0.50	ND	1		
Fluorene	0.0100	0.10	ND	1		
Phenanthrene	0.0066	0.10	ND	1		
Anthracene	0.0051	0.10	ND	1		
Fluoranthene	0.0074	0.10	ND	1		
Pyrene	0.0100	0.10	ND	1		
Benzo(a)anthracene	0.016	0.10	ND	1		
Chrysene	0.014	0.10	ND	1		
Benzo(b)fluoranthene	0.0084	0.10	ND	1		
Benzo(k)fluoranthene	0.011	0.10	ND	1		
Benzo(a)pyrene	0.014	0.10	ND	1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Dibenzo(a,h)anthracene	0.017	0.10	ND	1		
Benzo(g,h,i)perylene	0.016	0.10	ND	1		
Indeno(1,2,3-c,d)pyrene	0.016	0.10	ND	1		
Acenaphthylene	0.19	1.0	ND	1		
Acenaphthene	0.058	0.50	ND	1		
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Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	87	25-157	

omments:	

Analytical Method: SW8310	Preparatory Method:	SW3520	AAB #: D0602003
Lab Name: Columbia Analytical Services/R	Redding		
Field Sample ID: ASE-124A-6D2	Lab Sample ID:	D0602003-006	Matrix: Water
% Solids:		Initial Calibr	ration ID: 11/02/06LCI
Date Received: 12/08/06 Date	Extracted: 12/11/06	Date Analy	yzed: 12/14/06
Concentration Units (ug/L or ug/Kg dry weigl	ht): <u>UG/L</u>	Sample Volume:	1.010 L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.048	0.50	ND	1		
Fluorene	0.0100	0.10	ND	1		
Phenanthrene	0.0066	0.10	ND	1		
Anthracene	0.0051	0.10	ND	1		
Fluoranthene	0.0074	0.10	ND	1		
Pyrene	0.0100	0.10	ND	1		
Benzo(a)anthracene	0.016	0.10	ND	1		
Chrysene	0.014	0.10	ND	1		
Benzo(b)fluoranthene	0.0084	0.10	ND	1		
Benzo(k)fluoranthene	0.011	0.10	ND	1		
Benzo(a)pyrene	0.014	0.10	ND	1		
Dibenzo(a,h)anthracene	0.017	0.10	ND	1		
Benzo(g,h,i)perylene	0.016	0.10	ND	1		
Indeno(1,2,3-c,d)pyrene	0.016	0.10	ND	1		
Acenaphthylene	0.19	1.0	ND	1		
Acenaphthene	0.058	0.50	ND	1		
			A			

Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	98	25-157	

Comments:			
		-	

Analytical Method: SW8310	Preparatory Method:	SW3520	AAB #:_	D0602003
Lab Name: Columbia Analytical Services/I	Redding			
Field Sample ID: ASE-125A-6D2	Lab Sample ID:	D0602003-007	Matrix:	Water
% Solids:		Initial Calib	ration ID:	11/02/06LCI
Date Received: 12/08/06 Date	e Extracted: 12/11/06	Date Anal	lyzed: <u>12</u>	/14/06
Concentration Units (ug/L or ug/Kg dry weig	tht): UG/I	Sample Volume	1 040 1	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.048	0.50	ND	1		
Fluorene	0.0100	0.10	ND	1		
Phenanthrene	0.0066	0.10	ND	1		
Anthracene	0.0051	0.10	ND	1		
Fluoranthene	0.0074	0.10	ND	1		
Pyrene	0.0100	0.10	ND	1		
Benzo(a)anthracene	0.016	0.10	ND	1		
Chrysene	0.014	0.10	ND	1		
Benzo(b)fluoranthene	0.0084	0.10	ND	1		
Benzo(k)fluoranthene	0.011	0.10	ND	1		
Benzo(a)pyrene	0.014	0.10	ND	1		
Dibenzo(a,h)anthracene	0.017	0.10	ND	1		
Benzo(g,h,i)perylene	0.016	0.10	ND	1		
Indeno(1,2,3-c,d)pyrene	0.016	0.10	ND	1		
Acenaphthylene	0.19	1.0	ND	1		
Acenaphthene	0.058	0.50	ND	1		
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Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	85	25-157	
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Comments:		
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Analytical Method: SW8310	Preparatory Method:	SW3520	AAB #: D0602003
Lab Name: Columbia Analytical Services/	Redding		
Field Sample ID: ASE-128A-6D2	Lab Sample ID:	D0602003-008	Matrix: Water
% Solids:		Initial Calib	oration ID: 11/02/06LCI
Date Received: 12/08/06 Date	Extracted: 12/11/06	Date Ana	lyzed: 12/14/06
Concentration Units (ug/L or ug/Kg dry weig	ht): UG/L	Sample Volume:	1.040 L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.048	0.50	0.069	1		E4
Fluorene	0.0100	0.10	ND	1		
Phenanthrene	0.0066	0.10	ND	1		
Anthracene	0.0051	0.10	ND	1		
Fluoranthene	0.0074	0.10	ND	1		
Pyrene	0.0100	0.10	ND	1		
Benzo(a)anthracene	0.016	0.10	ND	1		
Chrysene	0.014	0.10	ND	1		
Benzo(b)fluoranthene	0.0084	0.10	ND	1		-
Benzo(k)fluoranthene	0.011	0.10	ND	1		
Benzo(a)pyrene	0.014	0.10	ND	1		
Dibenzo(a,h)anthracene	0.017	0.10	ND	1		
Benzo(g,h,i)perylene	0.016	0.10	ND	1		
Indeno(1,2,3-c,d)pyrene	0.016	0.10	ND	1		
Acenaphthylene	0.19	1.0	ND	1		
Acenaphthene	0.058	0.50	ND	1		
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Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	91	25-157	

Comments:		

Analytical Method: SW8310	Preparatory Method:	SW3520	AAB #: <u>D0602003</u>
Lab Name: Columbia Analytical Service	s/Redding		
Field Sample ID: PL-502-6D2	Lab Sample ID:	D0602003-014	Matrix: Water
% Solids:		Initial Calibr	ation ID: 11/02/06LCI
Date Received: 12/08/06 D	ate Extracted: 12/11/06	Date Analy	zed: 12/14/06
Concentration Units (ug/L or ug/Kg dry we	eight): <u>UG/L</u>	Sample Volume:	1.050 L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.048	0.50	ND	1		
Fluorene	0.0100	0.10	ND	1		
Phenanthrene	0.0066	0.10	0.013	11		E4
Anthracene	0.0051	0.10	ND	11		
Fluoranthene	0.0074	0.10	ND	1		
Pyrene	0.0100	0.10	0.11	1	0.024	C6
Benzo(a)anthracene	0.016	0.10	ND	1		
Chrysene	0.014	0.10	ND	1		
Benzo(b)fluoranthene	0.0084	0.10	ND	1		
Benzo(k)fluoranthene	0.011	0.10	ND	1		
Benzo(a)pyrene	0.014	0.10	0.019	1		E4
Dibenzo(a,h)anthracene	0.017	0.10	ND	1		
Benzo(g,h,i)perylene	0.016	0.10	0.024	1		E4
Indeno(1,2,3-c,d)pyrene	0.016	0.10	0.018	1		E4
Acenaphthylene	0.19	1.0	ND	1		
Acenaphthene	0.058	0.50	ND	1		

Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	88	25-157	

Comments:		

Analytical Method: SW8310	Preparatory Method:	SW3520	AAB #: <u>D0602003</u>	
Lab Name: Columbia Analytical Service	ces/Redding			
Field Sample ID: ASE-123A-6D2	Lab Sample ID:	D0602003-017	Matrix: Water	
% Solids:		Initial Calib	ration ID: 11/02/06LCI	_
Date Received: 12/08/06	Date Extracted: 12/11/06	Date Anal	yzed: <u>12/14/06</u>	
Concentration Units (ug/L or ug/Kg dry v	weight): UG/L	Sample Volume:	1.050 L	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.048	0.50	ND	1		
Fluorene	0.0100	0.10	ND	1		
Phenanthrene	0.0066	0.10	ND	1		
Anthracene	0.0051	0.10	ND	1		
Fluoranthene	0.0074	0.10	ND	1		
Pyrene	0.0100	0.10	ND	1		
Benzo(a)anthracene	0.016	0.10	ND	1		
Chrysene	0.014	0.10	ND	1		
Benzo(b)fluoranthene	0.0084	0.10	ND	1		
Benzo(k)fluoranthene	0.011	0.10	ND	1		
Benzo(a)pyrene	0.014	0.10	ND	1		
Dibenzo(a,h)anthracene	0.017	0.10	ND	1		
Benzo(g,h,i)perylene	0.016	0.10	ND	1		
Indeno(1,2,3-c,d)pyrene	0.016	0.10	ND	1		
Acenaphthylene	0.19	1.0	ND	1		
Acenaphthene	0.058	0.50	ND	1		
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Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	93	25-157	

Comments:			

# ORGANIC ANALYSES DATA SHEET 6 BLANKS

Analytical Method: SW8310	AAB #:
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: NWB11211
Lab Sample ID: NWB11211	
Initial Calibration ID: 11/02/06LCI	

Analyte	MDL	Method Blank	· RL	Q
Naphthalene	0.048	ND	0.50	
Fluorene	0.0100	ND	0.10	
Phenanthrene	0.0066	ND	0.10	
Anthracene	0.0051	ND	0.10	
Fluoranthene	0.0074	ND	0.10	
Pyrene	0.0100	ND	0.10	
Benzo(a)anthracene	0.016	ND	0.10	
Chrysene	0.014	ND	0.10	
Benzo(b)fluoranthene	0.0084	ND	0.10	
Benzo(k)fluoranthene	0.011	ND	0.10	
Benzo(a)pyrene	0.014	ND	0.10	
Dibenzo(a,h)anthracene	0.017	ND	0.10	
Benzo(g,h,i)perylene	0.016	ND	0.10	
Indeno(1,2,3-c,d)pyrene	0.016	ND	0.10	
Acenaphthylene	0.19	ND	1.0	
Acenaphthene	0.058	ND	0.50	
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Comments:		

## ORGANIC ANALYSES DATA SHEET 7 LABORATORY CONTROL SAMPLE

Analytical Method: SW8310	AAB #:D0602003
Lab Name: Columbia Analytical Ser	vices/Redding
LCS ID: NWB11211LCS	Concentration Units (ug/L or mg/kg): UG/L
Date Extracted: 12/11/06	Date Analyzed: 12/14/06
Initial Calibration ID: 11/02/06LC1	

Analyte	Expected	Found	%R	Control Limits	Q
Naphthalene	20.00	15.86	79	33-120	
Fluorene	4.000	3.585	90	53-125	
Phenanthrene	2.000	1.754	88	40-120	
Anthracene	2.000	1.670	84	54-125	
Fluoranthene	2.000	1.757	88	42-125	
Pyrene	2.000	1.855	93	55-125	
Benzo(a)anthracene	2.000	1.729	86	39-135	
Chrysene	2.000	1.872	94	59-134	
Benzo(b)fluoranthene	2.000	1.766	88	31-137	
Benzo(k)fluoranthene	2.000	1.809	90	60-129	
Benzo(a)pyrene	2.000	1.701	85	52-125	
Dibenzo(a,h)anthracene	4.000	3.442	86	51-125	
Benzo(g,h,i)perylene	4.000	3.370	84	34-120	
Indeno(1,2,3-c,d)pyrene	2.000	1.843	92	55-125	
Acenaphthene	20.00	16.39	82	43-130	
Acenaphthylene	40.00	32.01	80	40-121	
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Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	82	25-157	
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Comments:	
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# ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method:	: <u>SW</u>	8310	AAB#:	D0602003
Lab Name: Colu	mbia A	nalytical Services/Redding		
Instrument ID #:	LCI	FL		

Field Sample ID/Std ID/	Laboratory	Date Analysis	Time Analysis	Date Analysis	Time Analysis
Blank ID/QC Sample ID	File ID	Started	Started	Completed	Completed
KSTD1	I1102006	11/02/06	1334	11/02/06	1404
KSTD2	11102007	11/02/06	1405	11/02/06	1435
KSTD3	11102008	11/02/06	1436	11/02/06	1506
KSTD4	11102009	11/02/06	1506	11/02/06	1536
KSTD5	I1102010	11/02/06	1537	11/02/06	1607
QCALTSTD3	I1102011	11/02/06	1608	I 1/02/06	1638
KSTD4	I1214003	12/14/06	1218	12/14/06	1248
NWB11211	11214004	12/14/06	1255	12/14/06	1325
NWB11211LCS	I1214005	12/14/06	1326	12/14/06	1356
KSTD3	I1214010	12/14/06	1559	12/14/06	1629
ASE-122A-6D2	I1214012	12/14/06	1710	12/14/06	1740
ASE-124A-6D2	I1214013	12/14/06	1741	12/14/06	1811
ASE-125A-6D2	I1214014	12/14/06	1812	12/14/06	1842
ASE-128A-6D2	I1214015	12/14/06	1842	12/14/06	1912
PL-502-6D2	I1214016	12/14/06	1913	12/14/06	1943
ASE-123A-6D2	11214017	12/14/06	1944	12/14/06	2014
KSTD4	I1214020	12/14/06	2115	12/14/06	2145
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Comments:		

# ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method	l:SW	78310			AAB #: _	D0602003	
Lab Name: Colu	ımbia A	nalytical S	Services/Rec	lding	<del></del>		
Instrument ID #:	LCI	UV					

Field Sample ID/Std ID/	Laboratory	Date Analysis	Time Analysis	Date Analysis	Time Analysis
Blank ID/QC Sample ID	File ID	Started	Started	Completed	Completed
KSTD1	I1102006	11/02/06	1334	11/02/06	1404
KSTD2	11102007	11/02/06	1405	11/02/06	1435
KSTD3	11102008	11/02/06	1436	11/02/06	1506
KSTD4	11102009	11/02/06	1506	11/02/06	1536
KSTD5	11102010	11/02/06	1537	11/02/06	1607
QCALTSTD3	11102011	11/02/06	1608	11/02/06	1638
KSTD4	11214003	12/14/06	1218	12/14/06	1248
NWB11211	11214004	12/14/06	1255	12/14/06	1325
NWB11211LCS	11214005	12/14/06	1326	12/14/06	1356
KSTD3	11214010	12/14/06	1559	12/14/06	1629
ASE-122A-6D2	11214012	12/14/06	1710	12/14/06	1740
ASE-124A-6D2	11214013	12/14/06	1741	12/14/06	1811
ASE-125A-6D2	I1214014	12/14/06	1812	12/14/06	I 842
ASE-128A-6D2	I1214015	12/14/06	1842	12/14/06	1912
PL-502-6D2	I1214016	12/14/06	1913	12/14/06	1943
ASE-123A-6D2	I1214017	12/14/06	1944	12/14/06	2014
KSTD4	I1214020	12/14/06	2115	12/14/06	2145
	,				

Comments:	

# ORGANIC ANALYSES DATA SHEET APPENDIX A SURROGATE RESULTS

Analytical Method: SW8310			· A A	AB #: _D06	502002				
				1D#	002003				
Lab Name: Columbia Analy	tical Servi	ces/Reddir	ng						
Matrix: Water									
Field/QC Sample ID	S1	S2	S3	S4	S5	S6	S7	S8	Q
NWB11211	86								
NWB11211LCS	82	-						-	
ASE-122A-6D2	87								
ASE-124A-6D2	98								
ASE-125A-6D2	85								
ASE-128A-6D2	91								
PL-502-6D2	88								
ASE-123A-6D2	93								
				-					
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S1: Terphenyl-d14 - SS		25	-157						
respirator									
Comments:									
						:			

Redding, California 96003



December 26, 2006

Service Request No: D0602022

Shane Lowe CH2M Hill 2625 S. Plaza Drive Suite 300 Tempe, AZ 85282

RE: Sky Harbor/2959482

Dear Shane:

Enclosed are the results of the sample(s) submitted to our laboratory on December 9, 2006. For your reference, these analyses have been assigned our service request number D0602022.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 105. You may also contact me via email at MFesler@redding.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Mark Fesler

**Project Chemist** 

CC: Terri Krauss

Page 1 of \21

# **Current CAS Redding Accreditation Programs**

### Federal and National Programs

- U.S Air Force, Air Force Center for Environmental Excellence (AFCEE)

  Approved laboratory for Wastewater and Hazardous Waste
- U.S. Army Corps of Engineers MRD, HTRW Mandatory Center of Expertise
   Validated for Wastewater and Hazardous Waste
- Department of the Navy, Naval Facilities Engineering Service Center (NFESC)
   Approved laboratory for Wastewater and Hazardous Waste

### State and Local Programs

- State of Alaska, Department of Environmental Conservation Approved Laboratory for Contaminated Sites Lab ID UST-001
- State of Arizona, Department of Health Services, Office of Laboratory Licensure
   Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste
   Lab ID AZ0604
- State of California, Department of Health Services, National Environmental Laboratory Accreditation Program (NELAP)

Approved Laboratory for Drinking Water, Wastewater and Hazardous Waste Lab ID 01105CA

- Los Angeles County Sanitation District
   Approved Laboratory for Wastewater
   Lab ID 10243
- State of California, Department of Health Services, Environmental Laboratory Accreditation Program (ELAP)

Approved Laboratory for Microbiology of Drinking Water and Wastewater Lab ID 2635

- State of Florida, Department of Health, Bureau of Laboratories (NELAP)
   Approved Environmental Testing Laboratory for Wastewater and Hazardous Waste
- Lab ID E87203

  State of Kansas, Department of Health and Environment (NELAP)

Approved Laboratory for Hazardous Waste Lab ID E-10323

State of Massachusetts, Department of Environmental Protection

Approved laboratory for Drinking Water and Wastewater Lab ID M-CA025

• State of Oklahoma, Department of Environmental Quality

Approved Laboratory for General Water Quality/Sludge Testing Lab ID 9952

• State of Oregon, Environmental Laboratory Accreditation Program (ORELAP)

Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste

Lab ID CA200004

- State of Utah, Department of Health, Bureau of Laboratory Improvement (NELAP)
   Approved Laboratory for Wastewater and Hazardous Waste
   Lab ID QUAL1
- State of Washington, Department of Ecology

Approved Laboratory for Wastewater and Hazardous Waste Lab ID C1234

• State of Wisconsin, Department of Natural Resources

Approved Laboratory for Wastewater and Hazardous Waste Lab ID 999767340

### Arizona Data Qualifiers

Revision 2.0, 11/26/2003

# Developed by the Sub-committee of the Arizona Environmental Laboratory Advisory Committee

# Microbiology:

- A1 = Too numerous to count.
- A2 = Sample incubation period exceeded method requirement.
- A3 = Sample incubation period was shorter than method requirement.
- A4 = Target organism detected in associated method blank.
- A5 = Incubator/water bath temperature was outside method requirements.
- A6 = Target organism not detected in associated positive control.
- A7 = Micro sample received without adequate headspace.

#### Method/calibration blank:

- B1 = Target analyte detected in method blank at or above the method reporting limit.
- B2 = Non-target analyte detected in method blank and sample, producing interference.
- B3 = Target analyte detected in calibration blank at or above the method reporting limit.
- B4 = Target analyte detected in blank at/above method acceptance criteria.
- B5 = Target analyte detected in method blank at or above the method reporting limit, but below trigger level or MCL.
- B6 = Target analyte detected in calibration blank at or above the method reporting limit, but below trigger level or MCL.
- B7 = Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above the concentration found in the method blank.

#### Confirmation:

- C1 = Confirmatory analysis not performed as required by the method.
- C3 = Qualitative confirmation performed.
- C4 = Confirmatory analysis was past holding time.
- C5 = Confirmatory analysis was past holding time. Original result not confirmed.
- C6 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the higher value was reported as there was no obvious chromatographic interference.
- C7 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic interference.

#### Dilution:

- D1 = Sample required dilution due to matrix.
- D2 = Sample required dilution due to high concentration of target analyte.
- D3 = Sample dilution required due to insufficient sample.
- D4 = Minimum reporting level (MRL) adjusted to reflect sample amount received and analyzed.

#### Estimated concentration:

- E1 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
- E2 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
- E3 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to holding time requirements.

### Arizona Data Qualifiers Revision 2.0, 11/26/2003

- E4 = Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL).
- E5 = Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL), but not confirmed by alternate analysis.
- E6 = Concentration estimated. Internal standard recoveries did not meet method acceptance criteria.
- E7 = Concentration estimated. Internal standard recoveries did not meet laboratory acceptance criteria
- E8 = Analyte reported to MDL per project specification. Target analyte was not detected in the sample.

#### Hold time:

- H1 = Sample analysis performed past holding time.
- H2 = Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
- H3 = Sample was received and analyzed past holding time.
- H4 = Sample was extracted past required extraction holding time, but analyzed within analysis holding time.

#### BOD:

- K1 = The sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2 mg/L. Any reported result is an estimated value.
- K2 = The sample dilutions set up for the BOD analysis did not meet the criteria of a residual dissolved oxygen of at least 1 mg/L. Any reported result is an estimated value.
- K4 = The seed depletion was outside the method acceptance limits. The reported result is an estimated value.
- K5 = The dilution water D.O. depletion was > 0.2 mg/L.
- K6 = Glucose/glutamic acid BOD was below method acceptance criteria.
- K7 = A discrepancy between the BOD and COD results has been verified by reanalysis of the sample for COD.
- K8 = Glucose/glutamic acid BOD was above method acceptance levels.

# Laboratory fortified blank/blank spike:

- L1 = The associated blank spike recovery was above laboratory acceptance limits.
- L2 = The associated blank spike recovery was below laboratory acceptance limits.
- L3 = The associated blank spike recovery was above method acceptance limits.
- L4 = The associated blank spike recovery was below method acceptance limits.

#### Matrix spike:

- M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.
- M2 = Matrix spike recovery was low, the method control sample recovery was acceptable.
- M3 = The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
- M4 = The analysis of the spiked sample required a dilution such that the spike concentration was diluted below the reporting limit. The method control sample recovery was acceptable.
- M5 = Analyte concentration was determined by the method of standard addition (MSA).

# Arizona Data Qualifiers Revision 2.0, 11/26/2003

M6 = Matrix spike recovery was high. Data reported per ADEQ policy 0154.000.

M7 = Matrix spike recovery was low. Data reported per ADEQ policy 0154.000.

#### General:

N1 = See case narrative.

N2 = See corrective action report.

N3 = The analysis meets all method requirements. See case narrative.

### Sample quality:

- Q1 = Sample integrity was not maintained. See case narrative.
- Q2 = Sample received with headspace.
- Q3 = Sample received with improper chemical preservation.
- Q4 = Sample received and analyzed without chemical preservation.
- Q5 = Sample received with inadequate chemical preservation, but preserved by the laboratory.
- Q6 = Sample was received above recommended temperature.
- Q7 = Sample inadequately dechlorinated.
- Q8 = Insufficient sample received to meet method QC requirements. Batch QC requirements satisfies ADEQ policies 0154 and 0155.
- Q9 = Insufficient sample received to meet method QC requirements.
- Q10 = Sample received in inappropriate sample container.
- Q11 = Sample is heterogeneous. Sample homogeneity could not be readily achieved using routine laboratory practices.

#### **Duplicates:**

- R1 = RPD exceeded the method control limit. See case narrative.
- R2 = RPD exceeded the laboratory control limit. See case narrative.
- R4 = MS/MSD RPD exceeded the method control limit. Recovery met acceptance criteria.
- R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- R6 = LFB/LFBD RPD exceeded the method control limit. Recovery met acceptance criteria.
- R7 = LFB/LFBD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- R8 = Sample RPD exceeded the method control limit.
- R9 = Sample RPD exceeded the laboratory control limit.
- R10 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic problems.
- R11 = The RPD calculation for MS/MSD does not provide useful information due to the varying sample weights when Encore samplers/methanol field preserved samples are used.

#### Surrogate:

- S1 = Surrogate recovery was above laboratory acceptance limits, but within method acceptance limits.
- S3 = Surrogate recovery was above laboratory acceptance limits, but within method acceptance limits. No target analytes were detected in the sample.
- S4 = Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.
- S5 = Surrogate recovery was below laboratory acceptance limits, but within method acceptance limits.
- S6 = Surrogate recovery was below laboratory and method acceptance limits. Reextraction and/or reanalysis confirms low recovery caused by matrix effect.

## Arizona Data Qualifiers Revision 2.0, 11/26/2003

- S7 = Surrogate recovery was below laboratory and method acceptance limits. Unable to confirm matrix effect.
- S8 = The analysis of the sample required a dilution such that the surrogate recovery calculation does not provide any useful information. The method control sample recovery was acceptable.
- S10 = Surrogate recovery was above laboratory and method acceptance limits. See Case narrative.
- S11 = Surrogate recovery was high. Data reported per ADEQ policy 0154.000.
- S12 = Surrogate recovery was low. Data reported per ADEQ policy 0154.000.

#### Method/analyte discrepancies:

- T1 = Method approved by EPA, but not yet licensed by ADHS.
- T2 = Cited ADHS licensed method does not contain this analyte as part of method compound list.
- T3 = Method not promulgated either by EPA or ADHS.
- T4 = Tentatively identified compound. Concentration is estimated and based on the closest internal standard.

#### Calibration verification:

- V1 = CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
- V2 = CCV recovery was above method acceptance limits. This target analyte was detected in the sample. The sample could not be reanalyzed due to insufficient sample.
- V3 = CCV recovery was above method acceptance limits. This target analyte was detected in the sample, but the sample was not reanalyzed. See case narrative.
- V4 = CCV recovery was below method acceptance limits. The sample could not be reanalyzed due to insufficient sample.
- V5 = CCV recovery after a group of samples was above acceptance limits. This target analyte was not detected in the sample. Acceptable per EPA Method 8000B.
- V6 = Data reported from one-point calibration criteria per ADEQ policy 0155.000.
- V7 = Calibration verification recovery was above the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
- V8 = Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.

#### Calibration:

- W1 = The % RSD for this compound was above 20%. The average % RSD for all compounds in the calibration met the 20% criteria as specified in EPA method 8000B.
- W2 = The % RSD for this compound was above 15%. The average % RSD for all compounds in the calibration met the 15% criteria as specified in EPA method 8260B/8270C.

Client:

**Project:** Sky Harbor/2959482

Service Request: D0602022

# SAMPLE CROSS-REFERENCE

SAMPLE #	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	TIME
D0602022-001	TB-120706	12/08/06	00:50
D0602022-002	ASE-126A-6D2	12/08/06	03:12
D0602022-003	ASE-97A-6D2	12/08/06	02:34
D0602022-004	BC-8B-6D2	12/08/06	09:04
D0602022-005	ASE-90A-6D2	12/08/06	02:03
D0602022-006	ASE-112A-6D2	12/08/06	00:53
D0602022-007	ASE-105A-6D2	12/08/06	01:25
D0602022-008	PL-503-6D2	12/08/06	01:35
D0602022-009	ASE-89A-6D2	12/08/06	08:35
D0602022-010	ASE-103A-6D2	12/08/06	07:48
D0602022-011	ASE-100A-6D2	12/08/06	07:05
D0602022-012	ASE-101A-6D2	12/08/06	05:51
D0602022-013	ASE-102A-6D2	12/08/06	05:05
D0602022-014	ASE-110A-6D2	12/08/06	04:00
D0602022-015	BC-7A-6D2	12/08/06	09:51
D0602022-016	ASE-127A-6D2	12/08/06	10:31

# **CASE NARRATIVE**

Client:

Honeywell International, Incorporated

Service Request No.: D0602022

Project:

Sky Harbor

Date Received:

12/09/06

Sample Matrix: Aqueous

#### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables.

#### Sample Receipt

16 Aqueous samples were received for analysis at Columbia Analytical Services on 12/09/06.

The following discrepancies were noted upon initial sample inspection and documented on the cooler receipt/preservation form included in this data package:

 Discrepancies were noted between the Chain of Custody (COC) and the sample containers for samples TB-120706, ASE-126A-6D2, and ASE-127A-6D2. Per client, will use the date listed on the COC

The samples were received in good condition and otherwise consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4 degrees Celsius upon receipt at the laboratory.

#### TPH-Diesel and Motor Oil by EPA Method 8015B

#### Surrogate Recovery Exceptions:

The surrogate recoveries for Octacosane and Triacontane in sample ASE-89A-6D2 were within project requirements. However the amount recovered for both surrogates exceeded the highest calibration point in the instrument calibration. Since the surrogate recoveries were within the project requirements, no further corrective action was taken.

#### Volatile Organic Compounds by EPA Method 8260B

#### **Elevated Method Reporting Limits:**

Samples ASE-90A-6D2 and ASE-100A-6D2 required dilution due to the presence of elevated levels of target analytes, the reporting limits are adjusted to reflect the dilution.

#### Polynuclear Aromatic Hydrocarbons by EPA Method 8310

#### Matrix Spike Recovery Exceptions:

The recoveries of the surrogate and all analytes in the matrix spike duplicate of sample ASE-126A-6D2 were outside the lower control criteria due to an extraction error. The MSD of this sample was re-extracted three days outside holding time with good recoveries. The native and matrix spike were not re-extracted because there was insufficient sample. The results of the re-extracted MSD analysis are reported.

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ASE-112A-602   Dec 8 2006   CO 5/3   GW   WATER   S   X   X   X   X   X   X   X   X   X			-	WATER	300,000	×		
ASE-103A-602   Dec 8 2006   O 1 3 5   GW   WATER   S		9	3	WATER	0007250	×		
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ASE-894-602   Dec 8 2006   OT 8-75   GW   WATER   5   X   X   X   X   X   X   X   X   X		4	135	WATER	٦	×		
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5090 Caterpillar Road Redding, CA 96003 Phone: (530) 244-5262

Fax #: (530) 244-4109

## COOLER RECEIPT FORM

Projec	ct/Client: HONEY WELL	Batch No.:
1.	Cooler(s)/Sample(s) received on: 12/08/06	Shipped via: UPS
	Shipping Bill # (s):	# of Coolers/Packages5
2.	Radiological Screening by:	Acceptable Rejected
3.	Custody seals on outside of cooler: If yes, where? Front Rear Lt Side Rt Side	YES N/A
	Seals intact:	YES (NO)
	COOLER/SAMPLE PROCESS	ING
4.	Sample Processing/Tagging by: Joel Johnson	
5.	Cooler(s)/Sample(s) Temp's: $\frac{1^{\circ c}}{(or)}$ $\frac{5^{\circ c}}{(or)}$ $\frac{1^{\circ c}}{(or)}$ Temp. Blank (if included):	1°c 1°c
6.	Type of packing material (circle): Ice Blue Ice Bubble Wrap Bu	bble Bags Zip Locks Webbing
	Other:	
7.	Custody papers properly filled out (ink, signed, dated, released, etc.)?	YES NO
8.	Containers arrived in good condition (not broken, leaking, etc.)?	YES NO
9.	Samples received with adequate holding time remaining to conduct analyst	sis? YE\$ NO
10.	Container labels complete (i.e. analysis, preservation, date/time, etc.)?	VES NO
11.	Container labels and tags agree with custody papers?	YES NO
12.	Correct types of containers used for the tests indicated?	YES NO
	a.) Adequate sample received? If not, note on Exception Report	t. XES NO
13.	Containers supplied by:	(CAS) Other
14.	Preserved containers received with the appropriate preservative?  pH: VOA'S & CZ PER DOC (or) See pH log.	YES NO N/A
15.	VOA vials free of air bubbles?	(YES) NO N/A
16.	Trip Blank preparation date: 12-01-06	CAS Other N/A
17.	Volatile Soil samples: Encores or Plugs in Vials	
	Freezer or GC/MS Date	re:Time:N/A

See Exception Report for discrepancies.

Rev. 8/18/2004/ds



5090 Caterpillar Road

Redding, CA 96003

530-244-5227

FAX 530-244-4109

BATCH:

CLIENT: HONEYWELL

PROJECT

# SAMPLE RECEIPT EXCEPTION REPORT

	1) Holding Time	SMO Technician / Date: JOEL JOHNSON 12/09/06
Issue	2) Temperature	Project Chemist / Date: Dan More Mark Fosce 12/11 bs
Туре	3) COC/Label	Client Contact(s): Dan Mone /C +17 m Hill
Legend	4) Container	
	5) Other	
ltem #	Issue Type	DESCRIPTION
1	1	SAMPLE #7, CONTAINER #2 OF ASE-105A-602 DERIVED
		BROKEN. IL Amber Gr GO IJ DRO/RRO
	3	SAMPLE'S #1 = Z MISCARGLED AS COLLECTED ON 12/07/06 IN
		ACTUALLITY THEY WERE COLLECTED ON 12/08/06.
	-	
	3	SAMPLE # 16 CONTAINER HAVE 12/13/06 CROSSED OUT AND 12/08/06 PUT IN.
	5000000	
		Transwest Geochem
	£3	3725 E Atlanta Ave Phoenix AZ 8504
	- (%)	Client: Honeywell Date & Time: Dec 8 ?
		Field Sample ID: ASE-105A-6D2
		Test Parameters: SW8200 SW 3015
	Sai	Container No. 5 Preservative: '
i militagrafikansi ki Cirigi saga	and an income and a second and a second and a second and a second and a second and a second and a second and a	Container Type: 1-Liter Amber
	Secretary Control of the Control of	
	1	Corrective Actions Taken
1	(4) Ha	e another 1-Lander to use for 8015 DROLARO, Enough
-	- Com	aple volve to proceed.
		The volume is the same of the
	(3) For	(ab sapus -001,-002 viyuse date Cistedon Coc (12/0/0x)
	Erl	as saple - 016, will use date histed on coc (12/8/06)
		)
	Clien	I notified via enail mode 12/1/106
	1	

# **TPH – Diesel and Motor Oil**

Client: Project: Honeywell International, Incorporated Sky Harbor/2959482

Service Request:

D0602022

### Cover Page - Organic Analysis Data Package TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name	Lab Code	Date Collected	Date Received
ASE-126A-6D2	D0602022-002	12/08/2006	12/09/2006
ASE-97A-6D2	D0602022-003	12/08/2006	12/09/2006
BC-8B-6D2	D0602022-004	12/08/2006	12/09/2006
ASE-90A-6D2	D0602022-005	12/08/2006	12/09/2006
ASE-112A-6D2	D0602022-006	12/08/2006	12/09/2006
ASE-105A-6D2	D0602022-007	12/08/2006	12/09/2006
PL-503-6D2	D0602022-008	12/08/2006	12/09/2006
ASE-89A-6D2	D0602022-009	12/08/2006	12/09/2006
ASE-103A-6D2	D0602022-010	12/08/2006	12/09/2006
ASE-100A-6D2	D0602022-011	12/08/2006	12/09/2006
ASE-101A-6D2	D0602022-012	12/08/2006	12/09/2006
ASE-102A-6D2	D0602022-013	12/08/2006	12/09/2006
ASE-110A-6D2	D0602022-014	12/08/2006	12/09/2006
BC-7A-6D2	D0602022-015	12/08/2006	12/09/2006
ASE-127A-6D2	D0602022-016	12/08/2006	12/09/2006
ASE-126A-6D2MS	DWG0601067-1	12/08/2006	12/09/2006
ASE-126A-6D2DMS	DWG0601067-2	12/08/2006	12/09/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:	Wida Ang	Name: WIDA	ANG
Date:	12/20/06	Title: Organic	Managur

RR13317

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602022

Date Collected: 12/08/2006 **Date Received:** 12/09/2006

# TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-126A-6D2

Lab Code:

D0602022-002

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	<b>51</b> J	480	20	1	12/13/06	12/19/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/19/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	94	26-152	12/19/06		
Tricontane	93	40-140	12/19/06		

Comments:

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Form 1A - Organic

Page 1 of 1

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Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Ground water

Service Request: D0602022

Date Collected: 12/08/2006

**Date Received:** 12/09/2006

# TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

Sample Matrix:

ASE-97A-6D2

Lab Code:

D0602022-003

Units: ug/L Basis: NA

Extraction Method: EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	57 J	480	. 20	1	12/13/06	12/19/06	E4
C22 - C32 HRO (TPH-Motor Oil)	<b>52</b> J	480	30	1	12/13/06	12/19/06	E4

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	83	26-152	12/19/06		
Tricontane	83	40-140	12/19/06		

Comments:

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Form 1A - Organic

Page 1 of 1

SuperSet Reference: RR13317

Analytical Results

Client:

Honeywell International, Incorporated

Project: Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602022

**Date Collected: 12/08/2006** 

**Date Received:** 12/09/2006

# TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

BC-8B-6D2

Lab Code:

D0602022-004

Units: ug/L Basis: NA

Extraction Method: EPA 3510C

Level: Low

Analysis	Method:	80
Anarysis	Method:	0

015B

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	58 J	480	20	1	12/13/06	12/19/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/19/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	96	26-152	12/19/06		
Tricontane	97	40-140	12/19/06		

Comments:

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Form 1A - Organic

1 of 1

SuperSet Reference: RR13317

18

Analytical Results

Client:

Honeywell International, Incorporated

Project: Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602022

Date Collected: 12/08/2006

**Date Received:** 12/09/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-90A-6D2

Lab Code:

Units: ug/L Basis: NA

D0602022-005

Extraction Method:

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	1000	480	20	1	12/13/06	12/19/06	
C22 - C32 HRO (TPH-Motor Oil)	47 J	480	30	1	12/13/06	12/19/06	E4

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	96	26-152	12/19/06		
Tricontane	95	40-140	12/19/06		

**Comments:** 

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Form 1A - Organic

1 of

SuperSet Reference: RR13317

19

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602022

**Date Collected:** 12/08/2006

Date Received: 12/09/2006

# TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-112A-6D2

Lab Code:

D0602022-006

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

<b>Analyte Name</b>	

C22 - C32 HRO (TPH-Motor Oil)

C10 - C22 DRO (TPH-Diesel)

Result Q 210 J ND U **PQL MDL** 480 20 480 30

**Factor** Extracted 1 1

Dilution

Analyzed Note 12/13/06 12/13/06

Date

12/19/06 E4 12/19/06

Date

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	106	26-152	12/19/06		
Tricontane	104	40-140	12/19/06		

Comments:

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Form 1A - Organic

SuperSet Reference:

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RR13317

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Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602022

**Date Collected: 12/08/2006** 

Date Received: 12/09/2006

# TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-105A-6D2

Lab Code:

D0602022-007

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note	
C10 - C22 DRO (TPH-Diesel)	180 J	480	20	1	12/13/06	12/20/06	E4	-
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/20/06		

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	95	26-152	12/20/06		
Tricontane	94	40-140	12/20/06		

Comments:

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Form 1A - Organic

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1 of

SuperSet Reference: RR13317

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602022

Date Collected: 12/08/2006

**Date Received:** 12/09/2006

# TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

PL-503-6D2

Lab Code:

D0602022-008

Units: ug/L Basis: NA

Extraction Method: EPA 3510C

Level: Low

Analysis Method:

8015B

				Dilution	Date	Date		
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note	-
C10 - C22 DRO (TPH-Diesel)	180 J	480	20	1	12/13/06	12/20/06	E4	
C22 - C32 HRO (TPH-Motor Oil)	<b>39</b> J	480	30	1	12/13/06	12/20/06	E4	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
acosane	97	26-152	12/20/06	
Tricontane	96	40-140	12/20/06	

Comments:

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Form 1A - Organic

Page

1 of 1

SuperSet Reference: RR13317

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602022

**Date Collected:** 12/08/2006

**Date Received:** 12/09/2006

#### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-89A-6D2

Lab Code:

D0602022-009

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

**Analysis Method:** 

8015B

Level: Low

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	3100	480	20	1	12/13/06	12/20/06	
C22 - C32 HRO (TPH-Motor Oil)	<b>39</b> J	480	30	1	12/13/06	12/20/06	E4

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	129	26-152	12/20/06	E1	
Tricontane	128	40-140	12/20/06	E1	

Comments:

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SuperSet Reference:

RR13317

23

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Ground water

Service Request: D0602022

**Date Collected: 12/08/2006** 

**Date Received:** 12/09/2006

#### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

Sample Matrix:

ASE-103A-6D2

Lab Code:

D0602022-010

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

8015B

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	ND U	480	20	1	12/13/06	12/20/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/20/06	

Surrogate Name %Rec	Control Limits	Date Analyzed	Note	
Octacosane 99	26-152	12/20/06		
Tricontane 97	40-140	12/20/06		

Comments:

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Form 1A - Organic

Page

RR13317

SuperSet Reference:

Analytical Results

Client:

Honeywell International, Incorporated

Project: Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602022

**Date Collected:** 12/08/2006

**Date Received:** 12/09/2006

### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-100A-6D2

Lab Code:

D0602022-011

Units: ug/L

Basis: NA

Extraction Method:

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

				Dilution	Date	Date		
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note	
C10 - C22 DRO (TPH-Diesel)	ND U	480	20	· 1	12/13/06	12/20/06		
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/20/06		

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	108	26-152	12/20/06		
Tricontane	105	40-140	12/20/06		

Comments:

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Form 1A - Organic

1 of

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602022

**Date Collected:** 12/08/2006 **Date Received:** 12/09/2006

#### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-101A-6D2

Lab Code:

D0602022-012

Units: ug/L Basis: NA

Extraction Method: EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	<b>67</b> J	480	20	1	12/13/06	12/20/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/20/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Octacosane	101	26-152	12/20/06	
Tricontane	100	40-140	12/20/06	

Comments:

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Form 1A - Organic

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SuperSet Reference:

RR13317

26

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602022

**Date Collected:** 12/08/2006

**Date Received:** 12/09/2006

### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-102A-6D2

Lab Code:

D0602022-013

Units: ug/L Basis: NA

Extraction Method:

EPA 3510C

Level: Low

Analysis Method:

8015B

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	86 J	480	20	1	12/13/06	12/20/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/20/06	

**Comments:** 

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Form 1A - Organic

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Analytical Results

Client:

Honeywell International, Incorporated

Project: Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602022

**Date Collected:** 12/08/2006

**Date Received:** 12/09/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-110A-6D2

Lab Code:

D0602022-014

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

				Dilution	Date	Date		
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note	
C10 - C22 DRO (TPH-Diesel)	<b>26</b> J	480	20	1	12/13/06	12/20/06	E4	
C22 - C32 HRO (TPH-Motor Oil)	<b>54</b> J	480	30	. 1	12/13/06	12/20/06	E4	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	111	26-152	12/20/06		
Tricontane	109	40-140	12/20/06		

Comments:

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Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602022

**Date Collected: 12/08/2006** 

**Date Received:** 12/09/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

BC-7A-6D2

Lab Code:

D0602022-015

Units: ug/L Basis: NA

Extraction Method:

EPA 3510C

Level: Low

Analysis Method:

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	<b>39</b> J	480	20	1	12/13/06	12/20/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/20/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
Octacosane	83	26-152	12/20/06			
Tricontane	81	40-140	12/20/06			

Comments:

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SuperSet Reference: RR13317

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Analytical Results

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

**Date Collected:** 12/08/2006

Service Request: D0602022

Sample Matrix:

Ground water

**Date Received:** 12/09/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-127A-6D2

Units: ug/L

Lab Code:

D0602022-016

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	56 J	480	20	1	12/13/06	12/20/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/20/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	99	26-152	12/20/06		
Tricontane	97	40-140	12/20/06		

Comments:

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Form 1A - Organic

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Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Service Request: D0602022

Date Collected: NA

Sample Matrix:

Ground water

Date Received: NA

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

Method Blank

Lab Code:

Units: ug/L

DWG0601067-4

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed N	Vote
C10 - C22 DRO (TPH-Diesel)	ND U	500	20	1	12/13/06	12/19/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	500	30	1	12/13/06	12/19/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	 90	26-152	12/19/06		
Tricontane	87	40-140	12/19/06		

Comments:

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QA/QC Report

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602022

Surrogate Recovery Summary

TPH-Diesel / Motor Oil Range Organics by SW8015B

Extraction Method: EPA 3510C

Units: PERCENT

Level: Low

**Analysis Method:** 8015B

Sample Name	Lab Code	Sur1	Sur2
ASE-126A-6D2	D0602022-002	94	93
ASE-97A-6D2	D0602022-003	83	83
BC-8B-6D2	D0602022-004	96	97
ASE-90A-6D2	D0602022-005	96	95
ASE-112A-6D2	D0602022-006	106	104
ASE-105A-6D2	D0602022-007	95	94
PL-503-6D2	D0602022-008	97	96
ASE-89A-6D2	D0602022-009	129	128
ASE-103A-6D2	D0602022-010	99	97
ASE-100A-6D2	D0602022-011	108	105
ASE-101A-6D2	D0602022-012	101	100
ASE-102A-6D2	D0602022-013	101	99
ASE-110A-6D2	D0602022-014	111	109
BC-7A-6D2	D0602022-015	83	81
ASE-127A-6D2	D0602022-016	99	97
Method Blank	DWG0601067-4	90	87
ASE-126A-6D2MS	DWG0601067-1	98	98
ASE-126A-6D2DMS	DWG0601067-2	103	103
Lab Control Sample	DWG0601067-3	100	97

Surrogate Recovery Control Limits (%)

Sur1 = Octacosane Sur2 = Tricontane

26-152

40-140

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

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Form 2A - Organic

Page 1 of

QA/QC Report

Client:

Honeywell International, Incorporated

51

1900

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602022

**Date Extracted:** 12/13/2006

**Date Analyzed:** 12/19/2006

Matrix Spike/Duplicate Matrix Spike Summary TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-126A-6D2

Lab Code:

D0602022-002

Units: ug/L Basis: NA

**Extraction Method:** 

Level: Low

**Analysis Method:** 

C10 - C22 DRO (TPH-Diesel)

EPA 3510C 8015B

Extraction Lot: DWG0601067

61-143

30

ASE-126A-6D2MS

DWG0601067-1

2380

ASE-126A-6D2DMS

2380

81

DWG0601067-2

1990

Matrix Spike **Duplicate Matrix Spike** Sample %Rec **RPD** Result Limits **RPD** Limit **Analyte Name** Result Expected %Rec Result Expected %Rec

78

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed: 12/20/2006 17:21:34 P:\STEALTH\CRYSTAL.RPT\Form3DMS.rpt Form 3A - Organic

Page

SuperSet Reference: RR13317 1 of 33

QA/QC Report

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602022

**Date Extracted:** 12/13/2006

**Date Analyzed:** 12/19/2006

Lab Control Spike Summary

TPH-Diesel / Motor Oil Range Organics by SW8015B

Extraction Method:

EPA 3510C

**Analysis Method:** 

8015B

Units: ug/L

Basis: NA

Level: Low

Extraction Lot: DWG0601067

Lab Control Sample

DWG0601067-3 Lab Control Spike

%Rec Limits **Analyte Name** Result Expected %Rec C10 - C22 DRO (TPH-Diesel) 1660 2500 67 61-143 C22 - C32 HRO (TPH-Motor Oil) 1910 2500 76 60-120

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Page 1 of

SuperSet Reference:

RR13317

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# GC/MS VOLATILE ORGANICS

#### ORGANIC ANALYSES DATA PACKAGE

Analytical Method	: SW8260	AAB #: <u>D0602022</u>			
Lab Name: Colu	mbia Analytical Services/Redding				
Base/Command:	ARIZONA DELIVERABLES				
Project: Sky H	arbor				
	Field Sample ID	Lab Sample ID			
	TB-120706	D0602022-001			
	ASE-126A-6D2	D0602022-002			
	ASE-126A-6D2MS	D0602022-002MS			
	ASE-126A-6D2MSD	D0602022-002IMS D0602022-002MSD			
	ASE-97A-6D2	D0602022-003			
	BC-8B-6D2	D0602022-004			
	ASE-90A-6D2	D0602022-005			
	ASE-112A-6D2	D0602022-006			
	ASE-105A-6D2	D0602022-000 D0602022-007			
	PL-503-6D2	D0602022-007			
	ASE-89A-6D2	D0602022-009			
	ASE-103A-6D2	D0602022-010			
	ASE-100A-6D2	D0602022-010			
	ASE-101A-6D2	D0602022-011			
	ASE-101A-0D2 ASE-102A-6D2	D0602022-012			
	ASE-110A-6D2				
		D0602022-014			
	BC-7A-6D2	D0602022-015			
	ASE-127A-6D2	<u>D0602022-016</u>			
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	441-74	- AND MARKET CONTROL OF THE CONTROL			
Comments:					
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-					
I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.					
Signature:	Name:	Brian Moore			
Date:	/2//4/06 Title:	Brian Moore Technicae MANAger			

RDD-061214:DK:BS-1517PST-SR:D0602022-D0602022-V

Analytical Method: SW8260		AAB #:_ D0602022	_
Lab Name: Columbia Analytical Ser	vices/Redding		
Field Sample ID: TB-120706	Lab Sample ID:	D0602022-001 Matrix: Water	
% Solids:		Initial Calibration ID: 12/05/06MSM	_
Date Received: 12/09/06	Date Extracted:	Date Analyzed: 12/12/06	
Concentration Units (ug/L or ug/Kg dr	y weight): <u>UG/L</u>	Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	. 1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	2.5	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	ND	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1	-	
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		······································
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260			AAB #: D0602022
Lab Name: Columbia Analytical S	ervices/Redding		
Field Sample ID: TB-120706	Lab Sample ID:	D0602022-001	Matrix: Water
% Solids:		Initial Ca	libration ID: 12/05/06MSM
Date Received: 12/09/06	Date Extracted:	Date A	nalyzed: 12/12/06
Concentration Units (ug/L or ug/Kg)	dry weight): UG/I	Sample Volume	5 000 MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	ND	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1	·	
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Anaiyticai M	etnod: <u>SW8260</u>					AAB #:_D	0602022	
Lab Name:	Columbia Analyt	ical Services/Re	dding					
Field Sample	ID: <u>TB-120706</u>		Lab	Sample ID: I	D0602022-001	Matrix: _V	Vater	
% Solids:					Initial Calib	ration ID:	12/05/06M	SM
Date Receive	d: 12/09/06	Date I	Extracted:		Date Anal	yzed: 12/1	2/06	
	n Units (ug/L or ug							
	Analyte		MDL	RL	Concentration	Dilution	T	Qual
	Management							- Quan
	***************************************			-				
		· ·						
						-		
	*					·		
							·	
						-		
	Sur	rogate		Recovery	Control Limits	S Qua	lifier	ú
	4-Bromofluorob			98	82-124			
	Dibromofluoron Toluene-d8 - SS			97 98	84-127 80-117			
					30 117			
		Tr	iternal Sta	ndard	Qualifier	7		
		Fluorobenzen		indar d	Quanner			
		Chlorobenzen				_ `		
		1,4-Dichlorob	enzene-d4			_		
					Surrogate Recove	rias ara ranor	etad in Annand	iv O 1
Comments:					Internal Stand			
***************************************						**************************************	-	-

Analytical Method: SW8260	AAB#: D0602022					
Lab Name: Columbia Analytical Serv	rices/Redding					
Field Sample ID: ASE-126A-6D2	Lab Sample ID: D0602022-002 Matrix: Water					
% Solids:	Initial Calibration ID: 12/05/06MSM					
Date Received: 12/09/06	Date Extracted: Date Analyzed: 12/12/06					
Concentration Units (ug/L or ug/Kg dry weight): UG/L Sample Volume: 5.000 ML						

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	1.7	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	3.0	1		
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1	·	
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	2.6	1		
1,1-Dichloroethane	0.12	2.0	20	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.86	1		E4
2-Butanone	0.90	. 10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	0.44	. 1		E4
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	0.15	1		E4
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	1.2	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	11		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB #:_D0602022	
Lab Name: Columbia Analytical Serv	vices/Redding	
Field Sample ID: ASE-126A-6D2	Lab Sample ID: D0602022-002 Matrix: Water	
% Solids:	Initial Calibration ID: 12/05/06MSM	<u>[</u>
Date Received: 12/09/06	Date Extracted: Date Analyzed: _12/12/06	
Concentration Units (ug/L or ug/Kg dry	y weight): UG/L Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.29	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	0.44	1		E4
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	0.60	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	0.17	1		E4
sec-Butylbenzene	0.17	5.0	0.52	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	1.1	1		E4
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
	<u> </u>

Analytical Method: SW8260							AAB#:_D	0602022		
Lab Name:	Columbia Analyti	cal Services/	Redding							
_	ID: ASE-126A-				ample ID: I	00602	022-002	Matrix: V	Vater	
% Solids:	,						Initial Calib			,
	d: <u>12/09/06</u>	Dat	e Extrac	ted:						
	Units (ug/L or ug						Date And			<del></del> .
Concentration	Onits (ug/L or ug	ykg diy weig	ζIII.). <u>(</u>	JU/L		_ Sali	ipie voiunie.		<u> </u>	
	Analyte		MI	)L	RL	C	oncentration	Dilution	Confirm	Qualifier
						_				
						-				
									<u> </u>	
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	Sur	rogate		I	Recovery		Control Limit	s Qua	lifier	
	4-Bromofluorob				94		82-124			
	Dibromofluoron				94	-	84-127			
	Toluene-d8 - SS				96		80-117			
				<u> </u>	, dept. 1		1			
		-1 1	Interna	l Stan	dard		Qualifier			
		Fluorobenz Chlorobenz				· · · · · · · · · · · · · · · · · · ·		_		
		1,4-Dichlor		ne-d4						
	i						<u></u>			
							Surrogate Recov	eries are repoi	rted in Appena	lix O-A
Comments:							Internal Stand			

Analytical Method: SW8260	AAB #: <u>D0602022</u>
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-97A-6D2 Lab Sample ID:	D0602022-003 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/09/06 Date Extracted:	Date Analyzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	2.0	1		· · · · · · · · · · · · · · · · · · ·
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	2.6	1		
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	I		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	2.5	1		
1,1-Dichloroethane	0.12	2.0	23	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.72	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	0.33	1		E4
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	0.44	1		E4
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	1.2	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Internal Standards are reported in Appendix O-C

Analytical Method: SW8260		AAB #: <u>D0602022</u>	
Lab Name: Columbia Analytical Serv	ices/Redding		
Field Sample ID: ASE-97A-6D2	Lab Sample ID: D06020	022-003 Matrix: Water	
% Solids:		Initial Calibration ID: 12/05/06MSM	
Date Received: 12/09/06	Date Extracted:	Date Analyzed: 12/12/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sam	ple Volume:5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Oualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1	Commin	Quantiter
Tetrachloroethene	0.22	1.0	0.33	1		E4
1,3-Dichloropropane	0.22	2.0	ND	1		E4
2-Hexanone	0.58	10	ND ND			
Dibromochloromethane	0.38	2.0	ND	1 1		
	<del></del>	2.0		1		
1,2-Dibromoethane	0.15		ND			Γ4
Chlorobenzene	0.15	1.0	0.16	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	11		
Isopropylbenzene	0.17	2.0	0.99	1		E4
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	1.4	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1	4	
tert-Butylbenzene	0.18	5.0	ND	. 1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	. 1		
sec-Butylbenzene	0.17	5.0	0.88	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	2.6	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260		····					AAB #:D	0602022	
Lab Name:	Columbia Analyt	ical Services/	Redding	; >						
Field Sample	ID: <u>ASE-97A-6</u>	6D2		Lab S	ample ID: I	00602	2022-003	Matrix: _V	Vater	
% Solids:							Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: 12/09/06	Dat	te Extrac	ted: _	-		Date Anal	yzed: <u>12/1</u>	2/06	
Concentration	n Units (ug/L or ug	g/Kg dry weig	ght): <u> </u>	UG/L		San	nple Volume:	5.000 M	<u>L</u>	
	Analyte		MI	)L	RL	C	oncentration	Dilution	Confirm	Qualifier
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	Manustratus (*				ļ					
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		<del></del>	<u> </u>					· · · · · · · · · · · · · · · · · · ·		
						-		-		
						$\neg \vdash$				
	Sur	rogate		I	Recovery		Control Limit	s Qua	lifier	
	4-Bromofluorob				103		82-124			
	Dibromofluoron				101		84-127			
	Toluene-d8 - SS	<u> </u>			102		80-117	-		
	Beauticon de Contractor de La composition de la composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della		Interna	l Stan	ıdard		Qualifier	7		
		Fluorobenz					Quanti	-		
		Chlorobenz								
		1,4-Dichlor	robenzer	ie-d4						
0							Surrogate Recove			
Comments:							Internal Stand	uras are repor	iea in Append	ix U-C

Analytical Method: SW8260	AAB #: <u>D0602022</u>
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: BC-8B-6D2	Lab Sample ID: D0602022-004 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/09/06 Date Extract	ted: Date Analyzed: I2/12/06
Concentration Units (ug/L or ug/Kg dry weight):	JG/L Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		*.
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	4.1	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	3.5	1		
Acetone	1.0	20	1.1	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	I		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	28	1		
1,1-Dichloroethane	0.12	2.0	25	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1.		
cis-1,2-Dichloroethene	0.17	2.0	2.5	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1	·	
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	0.41	1		E4
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	1.6	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	1.0	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	Marianismature	AAB #: <u>D0602022</u>
Lab Name: Columbia Analytical Serv	rices/Redding	
Field Sample ID: BC-8B-6D2	Lab Sample ID: D0602022-004	Matrix: Water
% Solids:	Initial Ca	libration ID: 12/05/06MSM
Date Received: 12/09/06	Date Extracted: Date Ar	nalyzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry	weight): <u>UG/L</u> Sample Volume	: _5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.26	1		E4
1,3-Dichloropropane	0.11	2.0	ND	l		
2-Hexanone	0.58	10	ND	l		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	. ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	1.8	l		E4
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	l		
1,2,3-Trichloropropane	0.20	10	ND	l		
n-Propylbenzene	0.13	2.0	2.5	l		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND ND	1		
sec-Butylbenzene	0.17	5.0	1.1	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	2.9	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: <u>SW8260</u>	· · · · · · · · · · · · · · · · · · ·	•					AAB #: <u>D</u>	0602022	
Lab Name:	Columbia Analyt	ical Services/	Redding/	<u> </u>						
Field Sample ID: BC-8B-6D2				Lab Sa	ample ID:	D0602	00602022-004 Matrix: Water			
% Solids:							Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: <u>12/09/06</u>	Dat	te Extrac	ted:						
	n Units (ug/L or ug						mple Volume:			
	Analyte		MI	DL	RL	0	Concentration	Dilution	Confirm	Qualifier
							-			
									-	
									-	
			<u>L</u>	<u> </u>	<u> </u>					
	Surrogate			F	Recovery		Control Limits	s Qua	lifier	
	4-Bromofluorob Dibromofluoror				97 96		82-124			
	Toluene-d8 - SS			96		84-127 80-117				
			Interna	al Stan	ıdard	ard Qualifie				
	Fluorobenzene						<u> </u>			
Chlorobenzene-d5 1,4-Dichlorobenze										
		1,4-Dichlor	robenzen	ne-d4	DANIER MODELLA POR PROPERTO DE LA COMPONICIONA DELICONA DE LA COMPONICIONA DE LA COMPONICIONA DELICONA DELICONA DE LA COMPONICIONA DE LA COMPONICIONA DELICO					
Comments:							Surrogate Recove Internal Stand	-		
Comments.										
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Analytical Method: SW8260		AAB #: <u>D0602022</u>				
Lab Name: Columbia Analytical Serv	rices/Redding					
Field Sample ID: ASE-90A-6D2	Lab Sample ID:	D0602022-005 Matrix: Water				
% Solids:		Initial Calibration ID: 12/05/06MSM				
Date Received: 12/09/06	Date Extracted:	Date Analyzed: 12/12/06				
Concentration Units (ug/L or ug/Kg dry weight): UG/L Sample Volume: 5.000 ML						

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	4.4	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	7.8	1		
Trichlorofluoromethane	0.14	5.0	ND	1	·	
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	1.2	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	200	1		
1,1-Dichloroethane	0.12	2.0	20	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	1.3	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1	-	2
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1	·	
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	78	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.24	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.45	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
Comments:	

Analytical Method: SW8260			AAB #: <u>D0602022</u>	
Lab Name: Columbia Analytical Se	ervices/Redding			
Field Sample ID: ASE-90A-6D2	Lab Sample ID	: D0602022-005	Matrix: Water	
% Solids:		Initial Ca	alibration ID: 12/05/06MSM	
Date Received: 12/09/06	Date Extracted:	Date A	nalyzed: 12/12/06	
Concentration Units (ug/L or ug/Kg	dry weight): UG/I	Sample Volum	o: 5 000 MI	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.24	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.21	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	1.6	1		E4
Xylene (total)	0.14	10	0.73	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	20	I		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	23	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	0.26	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.57	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	0.93	1		E4
sec-Butylbenzene	0.17	5.0	5.7	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.51	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1	***************************************	
Naphthalene	0.29	2.0	75	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Internal Standards are reported in Appendix O-C

Analytical M	rtical Method: SW8260						AAB #:D	0602022	
Lab Name:	Columbia Analyti	cal Services/Red	ding						
Field Sample	Field Sample ID: ASE-90A-6D2 Lab Sample ID: D0602022-005 Matrix: Water						-		
% Solids:						Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: 12/09/06	Date Ex	ktracted	:		Date Anal	yzed: 12/1	2/06	
	Units (ug/L or ug								
	Analyte		MDL	R	L C	oncentration	Dilution	Confirm	Qualifie
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	Sur	rogate		Recover	y	Control Limits	Qua	lifier	
	4-Bromofluorob			97		82-124			
	Dibromofluoron			98		84-127			
	Toluene-d8 - SS			96		80-117			
							<b>_</b>		
				tandard		Qualifier			
	-	Fluorobenzene					_		
		Chlorobenzene 1,4-Dichlorobe		  4			-		
						_			
						Surrogate Recove	orias ara ranov	tad in Annana	lix O 1
Comments:						Internal Stand			
						-			

Analytical Method: SW8260	Automatococicae	AA	AB #: D0602022
Lab Name: Columbia Analytical Serv	ices/Redding		
Field Sample ID: ASE-90A-6D2DL	Lab Sample ID:	D0602022-005DL Ma	atrix: Water
% Solids:		Initial Calibrati	on ID: <u>12/05/06MSM</u>
Date Received: 12/09/06	Date Extracted:	Date Analyze	d: <u>12/12/06</u>
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:5	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	14	200	ND	40		D2
Chloromethane	9.2	200	ND	40		D2
Vinyl chloride	8.8	40	ND	40		D2
Bromomethane	11	40	ND	40		D2
Chloroethane	8.0	200	ND	40		D2
Trichlorofluoromethane	5.6	200	ND	40		D2
1,1-Dichloroethene	7.6	80	ND	40		D2
Acetone	40	800	ND	40		D2
Carbon disulfide	4.4	200	ND	40		D2
Methylene chloride	6.0	200	ND	40		D2
Iodomethane	8.0	400	ND	40		D2
trans-1,2-Dichloroethene	6.4	80	ND	40		D2
Tert-butylmethylether	6.8	40	240	40		D2
1,1-Dichloroethane	4.8	80	22	40		D2E4
Vinyl acetate	34	1000	ND	40		D2
2,2-Dichloropropane	13	80	ND	40		D2
cis-1,2-Dichloroethene	6.8	80	ND	40		D2
2-Butanone	36	400	ND	40		D2
Bromochloromethane	10	200	ND	40		D2
Chloroform	5.6	80	ND	40		D2
1,1,1-Trichloroethane	5.6	80	ND	40		D2
1,1-Dichloropropene	7.2	80	ND	40		D2
Carbon tetrachloride	7.2	80	ND	40		D2
Benzene	4.8	40	89	40		D2
1,2-Dichloroethane	7.2	40	ND	40		D2
Trichloroethene	4.0	40	ND	40		D2
1,2-Dichloropropane	6.8	80	ND	40		D2
Dibromomethane	7.2	80	ND	40		D2
Bromodichloromethane	6.8	40	ND	40		D2
cis-1,3-Dichloropropene	5.2	80	ND	40		D2
4-methyl-2-pentanone	34	400	ND	40		D2
Toluene	5.6	80	ND	40		D2
trans-1,3-Dichloropropene	7.6	80	ND	40		D2

Comments:	Internal Standards are reported in Appendix O-C

Analytical Method: SW8260			AAB #: D0602022
Lab Name: Columbia Analytical Serv	rices/Redding		
Field Sample ID: ASE-90A-6D2DL	Lab Sample ID:	D0602022-005DL	Matrix: Water
% Solids:		Initial Calib	oration ID: <u>12/05/06MSM</u>
Date Received: 12/09/06	Date Extracted:	Date Ana	lyzed: 12/12/06
Concentration Units (ug/L or ug/K a dry	weight): IIG/I	Sample Volume	5 000 MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	8.8	40	ND	40		D2
Tetrachloroethene	8.8	40	ND	40		D2
1,3-Dichloropropane	4.4	80	ND	40		D2
2-Hexanone	23	400	ND	40		D2
Dibromochloromethane	6.0	80	ND	40		D2
1,2-Dibromoethane	6.0	80	ND	40		D2
Chlorobenzene	6.0	40	ND	40		D2
1,1,1,2-Tetrachloroethane	9.2	200	ND	40		D2
Ethylbenzene	6.0	80	ND	40		D2
Xylene (total)	5.6	400	ND	40		D2
Styrene	6.4	80	ND	40		D2
Bromoform	7.2	200	ND	40		D2
Isopropylbenzene	6.8	80	22	40		D2E4
1,I,2,2-Tetrachloroethane	6.8	40	ND	40		D2
Bromobenzene	6.8	200	ND	40		D2
1,2,3-Trichloropropane	8.0	400	ND	40		D2
n-Propylbenzene	5.2	80	25	40		D2E4
2-Chlorotoluene	6.4	200	ND	40		D2
1,3,5-Trimethylbenzene	6.0	80	ND	40		D2
4-Chlorotoluene	6.4	200	ND	40		D2
tert-Butylbenzene	7.2	200	ND	40		D2
1,2,4-Trimethylbenzene	5.2	80	ND	40		D2
sec-Butylbenzene	6.8	200	7.3	40		D2E4
1,3-Dichlorobenzene	4.4	40	ND	40		D2
p-Isopropyltoluene	4.0	80	ND	40		D2
1,4-Dichlorobenzene	4.4	40	ND	40		D2
n-Butylbenzene	13	200	ND	40		D2
1,2-Dichlorobenzene	5.6	40	ND	40		D2
1,2-Dibromo-3-chloropropane	32	200	ND	40		D2
1,2,4-Trichlorobenzene	14	200	ND	40		D2
Hexachlorobutadiene	24	40	ND	40		D2
Naphthalene	12	80	210	40		D2
1,2,3-Trichlorobenzene	15	200	ND	40		D2

Comments:		ecoveries are reported in Appendix O-A Standards are reported in Appendix O-C

Analytical M	ethod: SW8260		-					AAB #: D	0602022	
Lab Name:	Columbia Analyti	ical Services/	Redding	,						
Field Sample	ID: ASE-90A-6	D2DL		Lab Sa	ample ID:	0602	022-005DL	Matrix: _V	Vater	_
% Solids:							Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: 12/09/06	Dat	e Extrac	ted:			Date Anal	yzed: 12/1	2/06	
Concentration	uug/L or ug	g/Kg dry wei	ght): <u> </u>	U <b>G/L</b>		San	nple Volume:	5.000 M	<u>L</u>	
	Analyte	-	MI	DL	RL	C	oncentration	Dilution	Confirm	Qualifier
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		rogate		F	Recovery	4	Control Limit	s Qua	lifier	
	4-Bromofluorob			97		82-124				
	Dibromofluoron Toluene-d8 - SS				97	84-127 80-117				
	Toldene-do - 55						00-117			
			Interna	al Stan	dard		Qualifier	1		
		Fluorobenz	ene							
		Chlorobenz								
		1,4-Dichlor	robenzer	ne-d4						
Comments:							Surrogate Recover Internal Stand			

Analytical Method: SW8260	WWW.W. Co.		AAB #: D0602022
Lab Name: Columbia Analytical Serv	rices/Redding		
Field Sample ID: ASE-112A-6D2	Lab Sample ID:	D0602022-006	Matrix: Water
% Solids:		Initial Calibr	ation ID: <u>12/05/06MSM</u>
Date Received: 12/09/06	Date Extracted:	Date Analy	/zed: 12/12/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.26	1		E4
Acetone	1.0	20	1.1	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	1.9	1		
1,1-Dichloroethane	0.12	2.0	0.48	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,I,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	^ ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	6.3	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.38	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.39	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB #: <u>D0602022</u>	
Lab Name: Columbia Analytical Serv	ices/Redding	
Field Sample ID: ASE-112A-6D2	Lab Sample ID: D0602022-006 Matrix: Water	
% Solids:	Initial Calibration ID: 12/05/06MSM	Ĺ
Date Received: 12/09/06	Date Extracted: Date Analyzed: 12/12/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.82	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	I		
Chlorobenzene	0.15	1.0	0.37	I		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	3.3	1		
Xylene (total)	0.14	10	5.7	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	4.5	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		"
n-Propylbenzene	0.13	2.0	2.6	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	1.1	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.54	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	2.2	1		
sec-Butylbenzene	0.17	5.0	5.4	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.57	1		E4
1,4-Dichlorobenzene	0.11	1.0	0.18	1		E4
n-Butylbenzene	0.33	5.0	1.2	1		E4
1,2-Dichlorobenzene	0.14	1.0	ND	1 .		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	4.3	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C
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Analytical M	ethod: SW8260							AAB#:D	0602022	
Lab Name:	Columbia Analyt	ical Services/R	Redding	r 2						
Field Sample	ID: ASE-112A	-6D2		Lab Sa	ample ID:	D0602	022-006	Matrix: V	Vater	
% Solids:	,				-		Initial Calib			SM
Date Receive	d: 12/09/06	Date	Extrac	ted:			Date Anal	yzed: 12/1	2/06	
	n Units (ug/L or ug						ple Volume:			
	Analyte		MI	DL	RL	C	oncentration	Dilution	Confirm	Qualifier
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	4-Bromofluorob	rrogate		F	Recovery		Control Limits	s Qua	lifier	
	Dibromofluoror				92 91		82-124 84-127			
	Toluene-d8 - SS				91		80-117			
			Interna	al Stan	dard	<del></del>	Qualifier			
		Fluorobenze	ne							
		Chlorobenzene-d5						_		
		1,4-Dichloro	benzer	ne-d4						
Comments:							Surrogate Recove Internal Stand			
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Analytical Method: SW8260	AAB #: D0602022
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-105A-6D2 Lab Sample ID:	D0602022-007 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/09/06 Date Extracted:	Date Analyzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	51	1		
1,1-Dichloroethane	0.12	2.0	0.53	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.25	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	59	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.17	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB #:_ <u>D0602022</u>
Lab Name: Columbia Analytical Serv	rices/Redding
Field Sample ID: ASE-105A-6D2	Lab Sample ID: D0602022-007 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/09/06	Date Extracted: Date Analyzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.28	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.20	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	6.4	1	·	
Xylene (total)	0.14	10	5.0	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	12	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	2.5	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	0.21	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.64	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	1.8	1		E4
sec-Butylbenzene	0.17	5.0	5.8	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.20	1		E4
1,4-Dichlorobenzene	0.11	1.0	0.12	1		E4
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	6.4	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

thod: SW8260		_					AAB#:	0602022	
Columbia Analyt	tical Services/	Redding	2						
ID: ASE-105A	-6D2		Lab Sa	ample ID: D	0602	022-007	Matrix: V	Vater	
				-	Initial Calibration ID: 12/05/06MSM				SM
l: 12/09/06	Dat	e Extrac	eted:			Date Anal	yzed: 12/1	2/06	
						•			-
		1		1		an contration	Dilution	Canfium	Qualifier
Allalyte		1911	)L	RL		oncentration	Ditution	Contirm	Quaimer
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			I			· · · · · · · · · · · · · · · · · · ·	s Qua	lifier	. ,
		<del></del>							
				96 96					
		Interna	al Stan	dard		Qualifier	1		
	Fluorobenz								
	1,4-Dichlor	robenzer	ne-d4						
						α			
·····				****					
	Columbia Analyt  ID: ASE-105A  d: 12/09/06  Units (ug/L or u  Analyte  Su  4-Bromofluoro  Dibromofluoro	Columbia Analytical Services/ ID: ASE-105A-6D2  d: 12/09/06 Dat  Units (ug/L or ug/Kg dry weig  Analyte  Surrogate  4-Bromofluorobenzene - SS  Dibromofluoromethane - SS  Toluene-d8 - SS  Fluorobenz  Chlorobenz	Columbia Analytical Services/Redding ID: ASE-105A-6D2  d: 12/09/06 Date Extract Units (ug/L or ug/Kg dry weight):  Analyte MI  Surrogate  4-Bromofluorobenzene - SS Dibromofluoromethane - SS Toluene-d8 - SS  International Fluorobenzene Chlorobenzene Chlorobenzene-d5	Columbia Analytical Services/Redding  ID: _ASE-105A-6D2	Columbia Analytical Services/Redding  ID: ASE-105A-6D2	Columbia Analytical Services/Redding   ID:   ASE-105A-6D2   Lab Sample ID:   D0602	Columbia Analytical Services/Redding   ID: ASE-105A-6D2   Lab Sample ID: D0602022-007   Initial Calib   Init	Columbia Analytical Services/Redding   ID: ASE-105A-6D2   Lab Sample ID: D0602022-007   Matrix: Note	Columbia Analytical Services/Redding

Analytical Method: SW8260			AAB #: <u>D0602022</u>
Lab Name: Columbia Analytical Services/Redd	ing		
Field Sample ID: PL-503-6D2	Lab Sample ID:	D0602022-008	Matrix: Water
% Solids:		lnitial Calib	ration ID: <u>12/05/06MSM</u>
Date Received: 12/09/06 Date Ext	racted:	Date Anal	yzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry weight):	UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1 .		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	11		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	49	1		
1,1-Dichloroethane	0.12	2.0	0.53	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.27	1		E4
2-Butanone	0.90	10	ND	11		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	, ND	1		w.
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	60	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	11		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.24	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	and Andrews and Andrews	AAB #: D0602022
Lab Name: Columbia Analytical Serv	ices/Redding	
Field Sample 1D: PL-503-6D2	Lab Sample ID: D0602022-008	Matrix: Water
% Solids:	Initial	Calibration ID: 12/05/06MSM
Date Received: 12/09/06	Date Extracted: Date	Analyzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volu	me: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.27	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.21	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	6.7	1		
Xylene (total)	0.14	10	5.3	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	. ND	1 .		
Isopropylbenzene	0.17	2.0	13	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	2.7	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	0.22	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.66	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	2.0	1		
sec-Butylbenzene	0.17	5.0	5.9	1		
1,3-Dichlorobenzene	0.11	1.0	ND	. 1		
p-Isopropyltoluene	0.10	2.0	0.23	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	6.8	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:		Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
	·	

Analytical Method: SW8260					AAB#: <u>D</u>	0602022	
Lab Name: Columbia Analyt	ical Services/Redding	5					
Field Sample ID: PL-503-6D	02	Lab Sample ID	: D0602	022-008	Matrix: _V	/ater	
% Solids:				Initial Calib	ration ID: _	12/05/06M	SM
Date Received: 12/09/06	Date Extrac	eted:		Date Anal	yzed: <u>12/1</u>	2/06	
Concentration Units (ug/L or ug	g/Kg dry weight): _1	UG/L	Sam	ple Volume:	5.000 MI	, and management	
Analyte	MI	DL RI	_ C	oncentration	Dilution	Confirm	Qualifier
				***	***************************************		
		.					
					-		
					***************************************		·
Sur	rrogate	Recovery	. (	Control Limits	s Qua	lifier	
4-Bromofluorob		99		82-124			
Dibromofluoror Toluene-d8 - SS		97 98		84-127			
Toluene-da - SS	)	98		80-117			
·		1		· · · · · · · · · · · · · · · · · · ·			
		al Standard	· · · · · · · · · · · · · · · · · · ·	Qualifier	_		
	Fluorobenzene Chlorobenzene-d5				-		
	1,4-Dichlorobenzene-d4						
	Bonney Control of the						
				Surrogate Recove	eries are repor	ted in Append	ix O-A
Comments:				Internal Stand			

Analytical Method: SW8260		AAF	B #:D0602022
Lab Name: Columbia Analytical Serv	rices/Redding		
Field Sample ID: ASE-89A-6D2	Lab Sample ID:	D0602022-009 Mat	rix: Water
% Solids:		Initial Calibration	n ID: <u>12/05/06MSM</u>
Date Received: 12/09/06	Date Extracted:	Date Analyzed	: 12/12/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: 5.	000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	1.0	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	. 20	2.3	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	360	1		
1,1-Dichloroethane	0.12	2.0	4.6	1		
Vinyl acetate	0.84	25	ND	11		
2,2-Dichloropropane	0.33	2.0	ND	. 1		
cis-1,2-Dichloroethene	0.17	2.0	3.0	1		
2-Butanone	0.90	10	ND	1		, , , , , , , , , , , , , , , , , , , ,
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1	-	
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	210	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.39	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260			AAB #: <u>D0602022</u>	
Lab Name: Columbia Analytical Serv	vices/Redding			
Field Sample ID: ASE-89A-6D2	Lab Sample ID:	D0602022-009	Matrix: Water	
% Solids:		Initial Cali	bration ID: <u>12/05/06M</u>	ISM
Date Received: 12/09/06	Date Extracted:	Date Ana	alyzed: 12/12/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	ND	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1	·	
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.26	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	3.6	1		***************************************
Xylene (total)	0.14	10	0.67	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	36	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	47	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	0.75	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	1.5	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	1.6	1		E4
sec-Butylbenzene	0.17	5.0	15	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	1.2	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	8.1	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	84	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260	·						AAB #:D	0602022	
Lab Name:	Columbia Analyti	ical Services/Red	dding							
Field Sample	ID: ASE-89A-6	5D2	I	Lab Sa	ample ID: D	0602	022-009	Matrix: _V	Vater	
% Solids:							Initial Calib	ration ID:	12/05/06M	SM
Date Receive	d: 12/09/06	Date E	xtract	ed:			Date Anal	yzed: _12/1	2/06	
	n Units (ug/L or ug									
	Analyte		MD	L	RL	С	oncentration	Dilution	Confirm	Qualifier
								·		
						+				
						-				
						+				
	***************************************					+-				
	·					+				
						-				
						+				
				***************************************						
	Sur	rogate		I	Recovery		Control Limit	s Qua	lifier	g 2 E
	4-Bromofluorob	enzene - SS			98		82-124			
	Dibromofluoron			~	100	-	84-127			
	Toluene-d8 - SS				96	+	80-117			
		T <sub>n</sub>	terna	l Ston	dord		Qualifier	7	24	
		Fluorobenzene		IStan	idard		Quanner	-		
		Chlorobenzene-d5								
		1,4-Dichlorob	enzen	e-d4						
							Surrogate Recove			
Comments:							Internal Stand	ards are repor	ted in Append	lix O-C
										1888-14-7

Analytical Method: SW8260	AAB #:_ D0602022
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-89A-6D2DL Lab Sample ID: D0	602022-009DL Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/09/06 Date Extracted:	Date Analyzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume:5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	14	200	ND	40		D2
Chloromethane	9.2	200	ND	40	:	D2
Vinyl chloride	8.8	40	ND	40		D2
Bromomethane	11	40	ND	40		D2 .
Chloroethane	8.0	200	ND	40		D2
Trichlorofluoromethane	5.6	200	ND	40		D2
1,1-Dichloroethene	7.6	80	ND	40		D2
Acetone	40	800	ND	40		D2
Carbon disulfide	4.4	200	ND	40		D2
Methylene chloride	6.0	200	ND	40		D2
Iodomethane	8.0	400	ND	40		D2
trans-1,2-Dichloroethene	6.4	80	ND	40		D2
Tert-butylmethylether	6.8	40	1100	40		D2
1,1-Dichloroethane	4.8	80	5.6	40		D2E4
Vinyl acetate	34	1000	ND	40		D2
2,2-Dichloropropane	13	80	ND	40		D2
cis-1,2-Dichloroethene	6.8	80	ND	40		D2
2-Butanone	36	400	ND	40		D2
Bromochloromethane	10	200	ND	40		D2
Chloroform	5.6	80	ND ND	40		D2
1,1,1-Trichloroethane	5.6	80	ND	40		D2
1,1-Dichloropropene	7.2	80	ND	40		D2
Carbon tetrachloride	7.2	80	nad k ND	40		D2
Benzene	4.8	40	490	40		D2
1,2-Dichloroethane	7.2	40	ND	40		D2
Trichloroethene	4.0	40	ND	40	Ÿ	D2
1,2-Dichloropropane	6.8	80	ND	40		D2
Dibromomethane	7.2	80	ND	40		D2
Bromodichloromethane	6.8	40	ND	40		D2
cis-1,3-Dichloropropene	5.2	80	ND	40		D2
4-methyl-2-pentanone	34	400	ND	40		D2
Toluene	5.6	80	ND	40		D2
trans-1,3-Dichloropropene	7.6	80	ND	40		D2

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C

Analytical Method: SW8260		AAB #: <u>D0602022</u>
Lab Name: Columbia Analytical Serv	vices/Redding	
Field Sample ID: ASE-89A-6D2DL	Lab Sample ID:	D0602022-009DL Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/09/06	Date Extracted:	Date Analyzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	8.8	40	ND	40		D2
Tetrachloroethene	8.8	40	ND	40		D2
1,3-Dichloropropane	4.4	80	ND	40		D2
2-Hexanone	23	400	ND	40		D2
Dibromochloromethane	6.0	80	ND	40		D2
1,2-Dibromoethane	6.0	80	ND	40		D2
Chlorobenzene	6.0	40	ND	40		D2
1,1,1,2-Tetrachloroethane	9.2	200	ND	40		D2
Ethylbenzene	6.0	80	ND	40		D2
Xylene (total)	5.6	400	ND	40		D2
Styrene	6.4	80	ND	40		D2
Bromoform	7.2	200	ND	40		D2
Isopropylbenzene	6.8	80	45	40		D2E4
1,1,2,2-Tetrachloroethane	6.8	40	ND	40		D2
Bromobenzene	6.8	200	ND	40		D2
1,2,3-Trichloropropane	8.0	400	ND	40		D2
n-Propylbenzene	5.2	80	57	40		D2E4
2-Chlorotoluene	6.4	200	ND	40		D2
1,3,5-Trimethylbenzene	6.0	80	51	40		D2E4
4-Chlorotoluene	6.4	200	ND	40		D2
tert-Butylbenzene	7.2	200	ND	40		D2
1,2,4-Trimethylbenzene	5.2	80	ND	40		D2
sec-Butylbenzene	6.8	200	18	40		D2E4
1,3-Dichlorobenzene	4.4	40	ND	40		D2
p-Isopropyltoluene	4.0	80	ND	40		D2
1,4-Dichlorobenzene	4.4	40	ND	40		D2
n-Butylbenzene	13	200	ND	40		D2
1,2-Dichlorobenzene	5.6	40	ND	40		D2
1,2-Dibromo-3-chloropropane	32	200	ND	40		D2
1,2,4-Trichlorobenzene	14	200	ND	40		D2
Hexachlorobutadiene	24	40	ND	40		D2
Naphthalene	12	80	240	40		D2
1,2,3-Trichlorobenzene	15	200	ND	40		D2

		Surrogate Recoveries are reported in Appendix O-A
Comments:		Internal Standards are reported in Appendix O-C
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Analytical M	ethod: SW8260							AAB#: D	0602022	
Lab Name:	Columbia Analyti	ical Services/	Redding	ţ						
_	ID: ASE-89A-6				ample ID:	D0602	022-009DL	Matrix: V	Vater	
% Solids:							Initial Calib	ration ID:	12/05/06M	SM
Date Received: 12/09/06 Date Extracte			ted:			Date Anal	yzed: 12/1	2/06		
	n Units (ug/L or ug									
	Analyte		MI	)L	RL	C	oncentration	Dilution	Confirm	Qualifier
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						_		· · · · · · · · · · · · · · · · · · ·		
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	Sur	rogate	W	I	Recovery		Control Limits	s Qua	lifier	
	4-Bromofluorob				96		82-124			
	Dibromofluoron			96		84-127 80-117				
	Toluene-d8 - SS									
		Internal Fluorobenzene		l Stan	dard		Qualifier	7		
							Qualifier	1		
		Chlorobenz								
		1,4-Dichlor	robenzer	ne-d4				_		
Commonter							Surrogate Recove Internal Stand			
Comments:							inernat starta	arus ure repor	т пррепа	

Analytical Method: SW8260	The state of the s	AAB #:_ D0602022
Lab Name: Columbia Analytical Serv	vices/Redding	
Field Sample ID: ASE-103A-6D2	Lab Sample ID:	D0602022-010 Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/09/06	Date Extracted:	Date Analyzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry	y weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		-
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.26	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	ND	1		
Vinyl acetate	0.84	25	ND	. 1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	11		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.29	· 1		E4 ~
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.21	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C

Analytical Method: SW8260		AAB #:_ D0602022
Lab Name: Columbia Analytical Serv	vices/Redding	
Field Sample ID: ASE-103A-6D2	Lab Sample ID: D0	602022-010 Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/09/06	Date Extracted:	Date Analyzed: <u>12/12/06</u>
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.45	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1 .		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.31	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		·
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	0.15	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	0.50	1		E4
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260						AAB#: <u>D</u>	0602022	
Lab Name: _	Columbia Analyti	ical Services/Redd	ing						
Field Sample	ID: <u>ASE-103A-</u>	-6D2	Lab S	ample ID: I	0602	022-010	Matrix: _V	/ater	
% Solids:						Initial Calib	ration ID: _	12/05/06M	SM
Date Received: 12/09/06 Date Ex			racted:			Date Anal	yzed: 12/1	2/06	
		g/Kg dry weight):							
		····		T				T	
	Analyte		MDL	RL	$\frac{\mathbf{C}}{\mathbf{C}}$	oncentration	Dilution	Confirm	Qualifier
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	4-Bromofluorob	rogate		Recovery 98	+	Control Limits 82-124	s Qua	lifier	
	Dibromofluoron	· ·		98		84-127			
	Toluene-d8 - SS		99			80-117			
					-				
		Inte	rnal Sta	ndard		Qualifier			
		Fluorobenzene							
		Chlorobenzene-o							
	·	1,4-Dichloroben	zene-d4		40/2014WWW.9CA1000				
Comments:						Surrogate Recove Internal Stand			
Comments.							,	3.3	-

Analytical Method: SW8260		AAB #: D0602022
Lab Name: Columbia Analytical Service	es/Redding	
Field Sample ID: ASE-100A-6D2	Lab Sample ID: D0602022	-011 Matrix: Water
% Solids:	Iı	nitial Calibration ID: 12/05/06MSM
Date Received: 12/09/06	Date Extracted:	Date Analyzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry w	reight): UG/L Sample	Volume: _5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.20	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	1.7	1		
1,1-Dichloroethane	0.12	2.0	0.18	1 .		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.27	1	,	E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.31	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	11		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB #: <u>D0602022</u>
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-100A-6D2 Lab Sample ID:	D0602022-011 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/09/06 Date Extracted:	Date Analyzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.41	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1	_	
Xylene (total)	0.14	10	ND	. 1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	0.16	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	. 1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:		Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Me	ethod: SW8260		-					AAB #:D	0602022	
Lab Name:	Columbia Analyti	ical Services/	Redding	<u></u>						
Field Sample	ID: ASE-100A-	-6D2		Lab Sa	ample ID: D	0602	022-011	Matrix: _V	Vater	· .
% Solids:							Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: 12/09/06	Dat	e Extrac	ted:			Date Anal	yzed: <u>12/1</u>	2/06	
	units (ug/L or ug									
	Analyte		MI	 )L	RL	C	oncentration	Dilution	Confirm	Qualifier
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	Sur	rogate		I	Recovery	T	Control Limits	S Qua	lifier	
	4-Bromofluorob	enzene - SS			102		82-124			
	Dibromofluoron				97		84-127			
	Toluene-d8 - SS	<u>i</u>			100		80-117			
			Interna	l Stor	doud	<u> </u>	Qualifier	1		
		Fluorobenz		II Stan	luaru		Quantier	-		
		Chlorobenz								
		1,4-Dichlor	robenzer	ne-d4						
G							Surrogate Recovers			
Comments:			-				iniernai Siand	aras are repor	iea in Append	ix O-C

Analytical Method: SW8260			AAB #: D0602022
Lab Name: Columbia Analytical Serv	vices/Redding		
Field Sample ID: ASE-101A-6D2	Lab Sample ID:	D0602022-012	Matrix: Water
% Solids:		Initial Calib	ration ID: <u>12/05/06MSM</u>
Date Received: 12/09/06	Date Extracted:	Date Anal	yzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		-
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.37	1		E4
Acetone	1.0	20	1.2	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	14	1		
1,1-Dichloroethane	0.12	2.0	1.8	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.15	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.43	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.30	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Internal Standards are reported in Appendix O-C

Analytical Method: SW8260			AAB #: <u>D0602022</u>	
Lab Name: Columbia Analytical Serv	vices/Redding			
Field Sample ID: ASE-101A-6D2	Lab Sample ID:	D0602022-012	Matrix: Water	
% Solids:		Initial Calil	bration ID: 12/05/06MSM	
Date Received: 12/09/06	Date Extracted:	Date Ana	alyzed: 12/12/06	
Concentration Units (ug/L or ug/K g dry	weight): IIG/I	Sample Volume	5 000 MI	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.91	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-TrichIoropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	0.17	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		,
1,3,5-Trimethylbenzene	0.15	2.0	ND	. 1		
4-Chlorotoluene	0.16	5.0	, ND	1		
tert-Butylbenzene	0.18	5.0	0.20	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	0.27	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	0.46	1		E4
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	0.35	1		E4
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260							AAB #:D	0602022	
Lab Name:	Columbia Analyti	ical Services/	Redding	<u> </u>						
_	ID: ASE-101A-				ample ID: D	0602	022-012	Matrix: _V	Vater	<u>.                                     </u>
% Solids:							Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: 12/09/06	Dat	e Extrac	ted: _			Date Anal	yzed: 12/1	2/06	-
	uug/L or ug									
	Analyte	,	MI	DL	RL	C	oncentration	Dilution	Confirm	Qualifier
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		rogate		F	Recovery	<del>  '</del>	Control Limits	S Qua	lifier	
	4-Bromofluorob  Dibromofluoron				98	+	82-124 84-127			
	Toluene-d8 - SS				99	<del> </del>	80-117			
			Interna	al Stan	dard		Qualifier		•	
		Fluorobenz	ene							
		Chlorobenz						_		
		1,4-Dichlor	obenzer	ne-d4		·		<u>J</u> .		
Comments:							Surrogate Recove Internal Stande			
										-

Analytical Method: SW8260	***************************************		AAB #: <u>D0602022</u>
Lab Name: Columbia Analytical Serv	vices/Redding		
Field Sample ID: ASE-102A-6D2	Lab Sample ID:	D0602022-013	Matrix: Water
% Solids:		Initial Calib	oration ID: <u>12/05/06MSM</u>
Date Received: 12/09/06	Date Extracted:	Date Ana	lyzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	. 1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.27	1		E4
Acetone	1.0	20	1.1	1		E4
Carbon disulfide	0.11	5.0	ND	1	·	
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	11		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	0.15	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	11		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.22	- 1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	. 1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.27	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.20	11		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Analytical Method: SW8260	AAB #: D0602022
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-102A-6D2 Lab Sample ID:	D0602022-013 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/09/06 Date Extracted:	Date Analyzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL .	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.67	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1 .		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND.	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	0.40	1		E4
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	0.35	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	" ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	-1		
sec-Butylbenzene	0.17	5.0	0.51	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1 .		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	0.65	1		E4
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Lab Name: Columbia Analytical Serield Sample ID: ASE-102A-6D2 % Solids:  Date Received: 12/09/06 Concentration Units (ug/L or ug/Kg d	Date Extrac	Lab Sample ID:			Vater	
% Solids:  Date Received: 12/09/06	Date Extrac				Vater	
Date Received: 12/09/06		ted:	Initial Ca			
		ted:		libration ID:	12/05/06M	SM
			Date Ar	nalyzed: 12/1	2/06	
Concentration Clints (ug/L or ug/Kg u		JG/L				
Analyte	MI	DL RL	Concentratio	n Dilution	Confirm	Qualifie
		·	-			
					-	
				-		
			-			
Surrogat	e	Recovery	Control Lin	nits Qua	llifier	-
4-Bromofluorobenzen	e - SS	98	82-124			
Dibromofluoromethan	e - SS	98	84-127			
Toluene-d8 - SS		97	80-117			
<u> </u>	Intorno	l Standard	Qualific		· · · · · · · · · · · · · · · · · · ·	
Fluc	robenzene	1 Standard	Quanne	-		
	robenzene-d5					
1,4-	Dichlorobenzen	e-d4				
				coveries are repo		
Comments:			Internal Sta	ındards are repoi	ted in Append	ix O-C

Analytical Method: SW8260	<u> </u>		AAB #: <u>D0602022</u>
Lab Name: Columbia Analytical Serv	vices/Redding		
Field Sample ID: ASE-110A-6D2	Lab Sample ID:	D0602022-014	Matrix: Water
% Solids:		Initial Cal	libration ID: 12/05/06MSM
Date Received: 12/09/06	Date Extracted:	Date An	nalyzed: 12/12/06
Concentration Units (ug/L or ug/K a dru	weight): UG/I	Sample Volume	5 000 MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1 .		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	. 1		
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	ND	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.42	1		E4 🐃
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.18	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C

Analytical Method: SW8260			AAB #: D0602022
Lab Name: Columbia Analytical Serv	vices/Redding		
Field Sample ID: ASE-110A-6D2	Lab Sample ID:	D0602022-014	Matrix: Water
% Solids:		Initial Calib	ration ID: <u>12/05/06MSM</u>
Date Received: 12/09/06	Date Extracted:	Date Anal	yzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.23	· I·		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1 .		
Bromoform	0.18	5,0	ND	1		
Isopropylbenzene	0.17	2.0	0.23	1		E4
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	0.33	.1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		,
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	0.23	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		,
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	0.54	1		E4
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	_	es are reported in Appendix O-A ds are reported in Appendix O-C

Analytical Me	ethod: SW8260							AAB #: <u>C</u>	00602022	
Lab Name:	Columbia Analyti	ical Services/	Redding	5						
	ID: <u>ASE-110A-</u>				ample ID: [	0602	022-014	Matrix: _\	Vater	
% Solids:							Initial Calib			
Date Receive	d: <u>12/09/06</u>	Date	e Extrac	ted:			Date Anal	yzed: <u>12/1</u>	2/06	
	n Units (ug/L or ug									
	Analyte		MI	DL	RL	С	oncentration	Dilution	Confirm	Qualifier
						-				
				- Campi dan camina da camana					-	
						_				
						-		·		
***************************************										
						_				
						_				
	Sur	rogate		I	Recovery	T	Control Limit	s Qua	lifier	
	4-Bromofluorob	enzene - SS			98		82-124			
	Dibromofluoron				99		84-127			
	Toluene-d8 - SS				100		80-117			
			<u> </u>	L			T			
		F1	Interna	ıl Stan	dard		Qualifier			
			luorobenzene hlorobenzene-d5					-		
		1,4-Dichlor		ne-d4		<del></del>				
					****			one made		
							Surrogate Recov	eries are repo	rted in Append	lix O-A
Comments:							Internal Stand			

Analytical Method: SW8260			AAB #: _ D0602022
Lab Name: Columbia Analytical Serv	rices/Redding		
Field Sample ID: BC-7A-6D2	Lab Sample ID:	D0602022-015	Matrix: Water
% Solids:		Initial Calib	oration ID: <u>12/05/06MSM</u>
Date Received: 12/09/06	Date Extracted:	Date Ana	lyzed: 12/12/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1	·	
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	1.2	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	0.49	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.50	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	0.63	1		E4
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	1.2	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1	The state of the s	
Bromodichloromethane	0.17	1.0	0.21	11		E4
cis-1,3-Dichloropropene	0.13	2.0	ND	1	·	
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.27	11		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	11		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB #:D0602022
Lab Name: Columbia Analytical Services/Re	dding
Field Sample ID: BC-7A-6D2	Lab Sample ID: D0602022-015 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/09/06 Date E	Extracted: Date Analyzed: _12/12/06
Concentration Units (ug/L or ug/Kg dry weight	): UG/L Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	2.5	1		
1,3-Dichloropropane	0.11	2.0	ND	1	·	
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.27	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	1.7	1		E4
Isopropylbenzene	0.17	2.0	1.2	1		E4
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	2.0	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		-
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	0.83	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	0.14	1		E4
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	-1		
Naphthalene	0.29	2.0	2.6	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Internal Standards are reported in Appendix O-A

Analytical Method: SW8260					AAB #: D0602022					
Lab Name:	Columbia Analyti	cal Services/R	edding							
Field Sample	ID: BC-7A-6D2	2	j	Lab Sa	mple ID: D	0602022-01	[5]	Matrix: <u>W</u>	/ater	1000-100m
% Solids:	•					Initi	al Calibr	ation ID: _	12/05/06M	SM
Date Receive	d: <u>12/09/06</u>	Date	Extract	ted:		Da	ate Analy	zed: 12/13	2/06	
	ug/L or ug							5.000 MI		
-	Analyte	·	MD	)L	RL	Concent	tration	Dilution	Confirm	Qualifier
								.,,		
				-						
	·									
										-
			· · · · · · · · · · · · · · · · · · ·							
	Sur	rogate		F	Recovery	Contro	ol Limits	Qua	lifier	
	4-Bromofluorob				100	82-	-124			
	Dibromofluoron				97		-127			
	Toluene-d8 - SS	)			98	80-	-117			
								<u> </u>		
			nterna	l Stan	dard	Qı	ıalifier			
	-	Fluorobenzer					- <del>* * * * *</del>	_		
Chlorobenzene-d5 1,4-Dichlorobenzer								-		
				***************************************	***************************************			<b></b>		
						Surrogo	ate Recove	ries are repor	ted in Append	lix O-A
Comments:								rds are report		
										<del></del>
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Analytical Method: SW8260			AAB #: D0602022	
Lab Name: Columbia Analytical Services/Re	edding			
Field Sample ID: ASE-127A-6D2	Lab Sample ID:	D0602022-016	Matrix: Water	
% Solids:		Initial Calib	ration ID: <u>12/05/06MSM</u>	_
Date Received: 12/09/06 Date I	Extracted:	Date Anal	yzed: 12/12/06	
Concentration Units (ug/L or ug/Kg dry weight	): <u>UG/L</u>	Sample Volume:	5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.39	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	, ND	1		
Tert-butylmethylether	0.17	1.0	4.0	1		
1,1-Dichloroethane	0.12	2.0	0.66	. 1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.25	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.15	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	0.16	1		E4
1,2-Dichloroethane	0.18	1.0	/ ND	1		
Trichloroethene	0.10	1.0	0.94	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	-		AAB #: <u>D0602022</u>	
Lab Name: Columbia Analytical Serv	rices/Redding			
Field Sample ID: ASE-127A-6D2	Lab Sample ID:	D0602022-016	Matrix: Water	
% Solids:		Initial Calib	oration ID: 12/05/06MSM	
Date Received: 12/09/06	Date Extracted:	Date Anal	lyzed: 12/12/06	
Concentration Unite (ug/L or ug/K a dry	weight): UG/I	Sample Volume	5 000 MI	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	1.4	1		
1,3-Dichloropropane	0.11	2.0	ND	1		·
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.23	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	0.43	-1		E4
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10.	ND	1		
n-Propylbenzene	0.13	2.0	0.87	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.19	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	1.6	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		:
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	0.85	1		E4
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

1,2,3-1richlorobenzene		0.37	5.0	ND	<u> </u>	<u> </u>	<u> </u>
Comments:				Surrogate Recove Internal Stando			

Analytical M	ethod: SW8260		_					AAB #:D	0602022	
Lab Name:	Columbia Analyt	ical Services	Redding/							
Field Sample	ID: ASE-127A	-6D2		Lab Sa	ample ID: D	0602	022-016	Matrix: _V	Vater	· ·
% Solids:							Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: 12/09/06	Dat	te Extrac	ted: _			Date Anal	yzed: <u>12/1</u>	2/06	
Concentration	n Units (ug/L or ug	g/Kg dry wei	ght): <u> </u>	JG/L		San	nple Volume:	5.000 M	L	
	Analyte		MI	)L	RL	C	oncentration	Dilution	Confirm	Qualifier
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						-		ALL CONTROL OF THE STREET, STR		
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<u> </u>					1					
		rrogate	·	I	Recovery	<u> </u>	Control Limit	s Qua	lifier	
	4-Bromofluorob	<del></del>			98 97	-	82-124			
	Dibromofluoror Toluene-d8 - SS				99	+-	84-127 80-117			
	A-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	-			· · · · · · · · · · · · · · · · · · ·					
	· .		Interna	l Stan	ıdard	· · · · · · · · · · · · · · · · · · ·	Qualifier	7		
		Fluorobenz					Quantier			
		Chlorobenz	zene-d5							
	*	1,4-Dichlor	robenzer	ie-d4						
C							Surrogate Recove Internal Stand			
Comments:							mernat stana	urus ure repor	ей ін Аррепа	

#### ORGANIC ANALYSES DATA SHEET 6 BLANKS

Analytical Method: SW8260	AAB #:D0602022
Lab Name: Columbia Analytical Services/Redding	· 
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1212W01
Lab Sample ID: M1212W01	
Initial Calibration ID: 12/05/06MSM	

Analyte	MDL	Method Blank	RL	Q
Dichlorodifluoromethane	0.36	ND	5.0	
Chloromethane	0.23	ND	5.0	
Vinyl chloride	0.22	ND	1.0	
Bromomethane	0.27	ND	1.0	
Chloroethane	0.20	ND	5.0	
Trichlorofluoromethane	0.14	ND	5.0	
1,1-Dichloroethene	0.19	ND	2.0	
Acetone	1.0	ND	20	
Carbon disulfide	0.11	ND	5.0	
Methylene chloride	0.15	ND	5.0	
Iodomethane	0.20	ND	10	
trans-1,2-Dichloroethene	0.16	ND	2.0	
Tert-butylmethylether	0.17	ND	1.0	
1,1-Dichloroethane	0.12	ND	2.0	
Vinyl acetate	0.84	ND	25	
2,2-Dichloropropane	0.33	ND	2.0	
cis-1,2-Dichloroethene	0.17	ND	2.0	
2-Butanone	0.90	ND	10	
Bromochloromethane	0.25	ND	5.0	
Chloroform	0.14	ND	2.0	
1,1,1-Trichloroethane	0.14	ND	2.0	
1,1-Dichloropropene	0.18	ND	2.0	***************************************
Carbon tetrachloride	0.18	ND	2.0	
Benzene	0.12	ND	1.0	
1,2-Dichloroethane	0.18	ND	1.0	
Trichloroethene	0.10	ND	1.0	
1,2-Dichloropropane	0.17	ND	2.0	
Dibromomethane	0.18	ND	2.0	
Bromodichloromethane	0.17	ND	1.0	
cis-1,3-Dichloropropene	0.13	ND	2.0	
4-methyl-2-pentanone	0.85	ND	10	
Toluene	0.14	ND	2.0	
trans-1,3-Dichloropropene	0.19	ND	2.0	

Comments:		
	Manual Committee and the committee of th	

#### ORGANIC ANALYSES DATA SHEET 6 BLANKS

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	· · · · · · · · · · · · · · · · · · ·
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1212W01
Lab Sample ID: M12I2W01	
1 1 1 C 1 1	

min	Culloration 1D.	12/05/001410	1147
		Analyte	

Analyte	MDL	Method Blank	RL	Q
1,1,2-Trichloroethane	0.22	ND	1.0	
Tetrachloroethene	0.22	ND	1.0	
1,3-Dichloropropane	0.11	ND	2.0	
2-Hexanone	0.58	ND	10	
Dibromochloromethane	0.15	ND	2.0	
1,2-Dibromoethane	0.15	ND	2.0	
Chlorobenzene	0.15	ND	1.0	
1,1,1,2-Tetrachloroethane	0.23	ND	5.0	
Ethylbenzene	0.15	ND	2.0	
Xylene (total)	0.14	ND	10	
Styrene	0.16	ND	2.0	
Bromoform	0.18	ND	5.0	
Isopropylbenzene	0.17	ND	2.0	
1,1,2,2-Tetrachloroethane	0.17	ND	1.0	
Bromobenzene	0.17	ND	5.0	
1,2,3-Trichloropropane	0.20	ND ND	10	
n-Propylbenzene	0.13	ND	2.0	
2-Chlorotoluene	0.16	ND	5.0	
1,3,5-Trimethylbenzene	0.15	ND	2.0	
4-Chlorotoluene	0.16	ND ND	5.0	
tert-Butylbenzene	0.18	ND	5.0	
1,2,4-Trimethylbenzene	0.13	ND	2.0	
sec-Butylbenzene	0.17	ND	5.0	
1,3-Dichlorobenzene	0.11	ND	1.0	
p-Isopropyltoluene	0.10	ND	2.0	
1,4-Dichlorobenzene	0.11	ND	1.0	
n-Butylbenzene	0.33	ND	5.0	
1,2-Dichlorobenzene	0.14	ND	1.0	
1,2-Dibromo-3-chloropropane	0.81	ND	5.0	
1,2,4-Trichlorobenzene	0.36	ND	5.0	
Hexachlorobutadiene	0.60	ND	1.0	
Naphthalene	0.29	ND	2.0	
1,2,3-Trichlorobenzene	0.37	ND	5.0	

Comments:			

#### ORGANIC ANALYSES DATA SHEET 6 BLANKS

Analytical	Method: SW8260	)	AAB #: _	D0602022	- 	
Lab Name:	Columbia Anal	ytical Services/Reddir	ng			
Concentrat	ion Units (ug/L or	mg/kg): UG/L	Metl	hod Blank ID: M12	12W01	_
Lab Sample	e ID: M1212W01	· ·				
Initial Calil	oration ID: 12/05	/06MSM				
	Ana	lyte	MDL	Method Blank	RL	Q
					· · ·	
,						
-						
	-	-				
	<del></del>					-
	-	-				
	Sur	rrogate	Recovery	Control Limit	ts Qualifier	
	4-Bromofluorol		97	82-124		
	Dibromofluoror		98	84-127		_
	Toluene-d8 - SS	3	96	80-117		_
		-				
		Interna	l Standard	Qualifier		
		Fluorobenzene				
		Chlorobenzene-d5				
		1,4-Dichlorobenzen	e-d4			

Comments:

#### ORGANIC ANALYSES DATA SHEET 7 LABORATORY CONTROL SAMPLE

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Serv	vices/Redding
LCS ID: M1212W01LCS	Concentration Units (ug/L or mg/kg): UG/L
Date Extracted:	Date Analyzed: 12/12/06

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	11.9	119	27-158	
Chloromethane	10.0	10.8	108	51-137	
Vinyl chloride	10.0	10.5	105	57-137	
Bromomethane	10.0	11.1	111	44-156	
Chloroethane	10.0	10.6	106	60-140	
Trichlorofluoromethane	10.0	10.8	108	54-146	
1,1-Dichloroethene	10.0	10.8	108	70-130	
Acetone	50.0	45.9	92	55-137	
Carbon disulfide	10.0	10.0	100	50-127	
Methylene chloride	10.0	9.8	98	73-121	
Iodomethane	10.0	9.3	93	50-150	<b>E</b> 4
trans-1,2-Dichloroethene	10.0	9.5	95	74-124	
Tert-butylmethylether	10.0	9.8	98	75-119	
1,1-Dichloroethane	10.0	9.6	96	78-121	
Vinyl acetate	10.0	10.8	108	52-129	E4
2,2-Dichloropropane	10.0	10.0	100	61-137	
cis-1,2-Dichloroethene	10.0	10.1	101	80-118	
2-Butanone	50.0	47.8	96	76-122	
Bromochloromethane	10.0	9.5	95	82-118	
Chloroform	10.0	9.4	94	73-125	
1,1,1-Trichloroethane	10.0	9.6	96	76-124	
1,1-Dichloropropene	10.0	9.8	98	80-119	
Carbon tetrachloride	10.0	9.6	96	68-135	
Benzene	10.0	10.0	100	81-119	
1,2-Dichloroethane	10.0	9.6	96	75-122	
Trichloroethene	10.0	9.7	97	79-118	
1,2-Dichloropropane	10.0	9.6	96	82-115	
Dibromomethane	10.0	9.9	99	84-116	
Bromodichloromethane	10.0	9.7	97	81-122	
cis-1,3-Dichloropropene	10.0	10.1	101	78-118	
4-methyl-2-pentanone	50.0	49.1	98	81-127	
Toluene	10.0	9.5	95	83-116	
trans-1,3-Dichloropropene	10.0	9.8	98	73-122	***************************************

Comments:		

Analytical Method: SW8260	AAB #:	
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1212W01LCS	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/12/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
I,1,2-Trichloroethane	10.0	9.8	98	83-120	
Tetrachloroethene	10.0	10.0	100	82-118	
1,3-Dichloropropane	10.0	9.8	98	82-119	
2-Hexanone	50.0	47.0	94	81-130	
Dibromochloromethane	10.0	9.6	96	79-124	-
1,2-Dibromoethane	10.0	9.8	98	82-116	
Chlorobenzene	10.0	9.8	98	86-114	
1,1,1,2-Tetrachloroethane	10.0	9.5	95	79-122	
Ethylbenzene	10.0	10.0	100	86-116	
Xylene (total)	30.0	29.5	98	85-117	
Styrene	10.0	10.0	100	84-119	
Bromoform	10.0	9.0	90	71-133	
Isopropylbenzene	10.0	10.2	102	77-117	
1,1,2,2-Tetrachloroethane	10.0	9.6	96	80-117	1.0
Bromobenzene	10.0	9.9	99	84-120	
1,2,3-Trichloropropane	10.0	9.6	96	81-122	E4
n-Propylbenzene	10.0	10.1	101	87-117	
2-Chlorotoluene	10.0	10.1	101	87-119	
1,3,5-Trimethylbenzene	10.0	10.1	101	83-120	
4-Chlorotoluene	10.0	10.0	100	86-118	
tert-Butylbenzene	10.0	8.7	87	82-122	-
1,2,4-Trimethylbenzene	10.0	10.2	102	86-121	
sec-Butylbenzene	10.0	10.6	106	84-128	
1,3-Dichlorobenzene	10.0	9.9	99	85-119	·
p-Isopropyltoluene	10.0	10.1	101	84-121	
1,4-Dichlorobenzene	10.0	9.9	99	84-118	
n-Butylbenzene	10.0	9.8	98	81-123	
1,2-Dichlorobenzene	10.0	10.0	100	85-117	
1,2-Dibromo-3-chloropropane	40.0	35.8	90	67-121	
1,2,4-Trichlorobenzene	10.0	9.5	95	69-128	
Hexachlorobutadiene	10.0	9.8	98	71-135	
Naphthalene	10.0	9.7	97	60-131	
1,2,3-Trichlorobenzene	10.0	9.2	92	69-130	

Comments:			

Analytica	l Method: SW82	60	AAE	#: <u>D060</u> 2	2022	-	
Lab Name	e: <u>Columbia An</u>	alytical Services/Red	lding	<u> </u>			
LCS ID:	M1212W01LCS	Conce	ntration Units (	ug/L or mg	g/kg): <u>UG/L</u>		
Date Extra	acted:	Date An	alyzed: 12/12	/06			
	ibration ID: 12/0						
	Analyte		Expected	Found	%R	Control Limits	Q
		-					
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	······································			- ,		V-1	
		rogate	Recover	y C	Control Limits	Qualifier	
	4-Bromofluorob		102		82-124		
	Dibromofluoron Toluene-d8 - SS		100 98		84-127 80-117		
		Intern	al Standard		Qualifier		
		Fluorobenzene			- Vannar		
		Chlorobenzene-d5					
	٠	1,4-Dichlorobenze	ne-d4			<u> </u>	
Comment							
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Analytical Method: SW8260	AAB #: <u>D0602022</u>	<del></del>
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1212W01LCSD	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/12/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	12.8	128	27-158	
Chloromethane	10.0	11.3	113	51-137	
Vinyl chloride	10.0	11.1	111	57-137	
Bromomethane	10.0	11.4	114	44-156	
Chloroethane	10.0	11.3	113	60-140	
Trichlorofluoromethane	10.0	11.9	119	54-146	
1,1-Dichloroethene	10.0	10.8	108	70-130	
Acetone	50.0	49.9	100	55-137	
Carbon disulfide	10.0	10.2	102	50-127	
Methylene chloride	10.0	10.0	100	73-121	-
Iodomethane	10.0	9.4	94	50-150	<b>E4</b>
trans-1,2-Dichloroethene	10.0	9.8	98	74-124	
Tert-butylmethylether	10.0	9.9	99	75-119	
1,1-Dichloroethane	10.0	9.8	98	78-121	
Vinyl acetate	10.0	10.8	108	52-129	E4
2,2-Dichloropropane	10.0	10.0	100	61-137	
cis-1,2-Dichloroethene	10.0	10.3	103	80-118	-
2-Butanone	50.0	50.8	102	76-122	
Bromochloromethane	10.0	10.0	100	82-118	
Chloroform	10.0	9.7	97	73-125	
1,1,1-Trichloroethane	10.0	9.8	98	76-124	
1,1-Dichloropropene	10.0	10.1	101	80-119	
Carbon tetrachloride	10.0	10.0	100	68-135	
Benzene	10.0	10.1	101	81-119	
1,2-Dichloroethane	10.0	9.9	99	75-122	
Trichloroethene	10.0	9.9	99	79-118	
1,2-Dichloropropane	10.0	9.8	98	82-115	
Dibromomethane	10.0	10.0	100	84-116	
Bromodichloromethane	10.0	10.0	100	81-122	
cis-1,3-Dichloropropene	10.0	10.4	104	78-118	
4-methyl-2-pentanone	50.0	52.5	105	81-127	
Toluene	10.0	9.8	98	83-116	
trans-1,3-Dichloropropene	10.0	9.9	99	73-122	

Comments:				
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Analytical Method: SW8260	AAB #: <u>D0602022</u>	
Lab Name: Columbia Analytical S	ervices/Redding	
LCS ID: M1212W01LCSD	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/12/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	9.3	93	83-120	-
Tetrachloroethene	10.0	10.1	101	82-118	
1,3-Dichloropropane	10.0	10.0	100	82-119	
2-Hexanone	50.0	50.8	102	81-130	
Dibromochloromethane	10.0	9.9	99	79-124	
1,2-Dibromoethane	10.0	10.1	101	82-116	
Chlorobenzene	10.0	10.0	100	86-114	
1,1,1,2-Tetrachloroethane	10.0	9.8	98	79-122	
Ethylbenzene	10.0	10.1	101	86-116	
Xylene (total)	30.0	30.2	101	85-117	
Styrene	10.0	10.3	103	84-119	
Bromoform	10.0	9.6	96	71-133	
Isopropylbenzene	10.0	10.4	104	77-117	
1,1,2,2-Tetrachloroethane	10.0	10.0	100	80-117	
Bromobenzene	10.0	10.1	101	84-120	-
1,2,3-Trichloropropane	10.0	9.8	98	81-122	E4
n-Propylbenzene	10.0	10.0	100	87-117	
2-Chlorotoluene	10.0	10.1	101	87-119	
1,3,5-Trimethylbenzene	10.0	9.9	99	83-120	
4-Chlorotoluene	10.0	10.0	100	86-118	
tert-Butylbenzene	10.0	8.9	89	82-122	
1,2,4-Trimethylbenzene	10.0	10.2	102	86-121	
sec-Butylbenzene	10.0	10.6	106	84-128	
1,3-Dichlorobenzene	10.0	10.0	100	85-119	
p-Isopropyltoluene	10.0	10.1	101	84-121	
1,4-Dichlorobenzene	10.0	10.0	100	84-118	
n-Butylbenzene	10.0	9.8	98	81-123	
1,2-Dichlorobenzene	10.0	9.9	99	85-117	
1,2-Dibromo-3-chloropropane	40.0	37.8	94	67-121	
1,2,4-Trichlorobenzene	10.0	9.2	92	69-128	
Hexachlorobutadiene	10.0	9.6	96	71-135	
Naphthalene	10.0	9.7	97	60-131	
1,2,3-Trichlorobenzene	10.0	8.9	89	69-130	

Comments:			
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Analytica	l Method: SW82	60	AAE	3 #: <u>D</u> 0	0602022		
Lab Name	e: Columbia An	alytical Services/Red	ding				
		O Conce	,	— (ug/L. or	mg/kg): UG/L		
		Date An	alyzed: 12/12	/06	<del></del> -		
Initial Cal	libration ID: 12/0	5/06MSM					
	Analyte	2	Expected	Foun	ıd %R	Control Limits	Q
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	Sur	rogate	Recover	y	Control Limits	Qualifier	· ·
	4-Bromofluorob		99		82-124	•	
	Dibromofluoron		100		84-127		
	Toluene-d8 - SS		99		80-117		
	]						
		Interna	al Standard		Qualifier	1	
		Fluorobenzene				]	
		Chlorobenzene-d5				1	
		1,4-Dichlorobenzer	ne-d4				
Comment	s:						
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# ORGANIC ANALYSES DATA SHEET 7 LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE

Analytical Method: SW8260	, A	AAB #: _D0602022	2
Lab Name: Columbia Analytical Services/Red	ding	·	
Concentration Units (ug/L or mg/kg): UG/L			%Solids:
Parent Field Sample ID: M1212W01	BS ID.	M1212W01LCS	RSD ID: M1212W011 CSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Dichlorodifluoromethane		10.0	11.9	119	12.8	128	7	20	27-158	
Chloromethane		- 10.0	10.8	108	11.3	113	4	20	51-137	
Vinyl chloride		10.0	10.5	105	11.1	-111	6	20	57-137	
Bromomethane		10.0	11.1	111	. 11.4	114	3	20	44-156	
Chloroethane		10.0	10.6	106	11.3	113	6	20	60-140	
Trichlorofluoromethane		10.0	10.8	108	11.9	119	10	20	54-146	
1,1-Dichloroethene		10.0	10.8	108	10.8	108	0	20	70-130	
Acetone		50.0	45.9	92	49.9	100	8	20	55-137	
Carbon disulfide		10.0	10.0	100	10.2	102	2	20	50-127	
Methylene chloride		10.0	9.8	98	10.0	100	2	20	73-121	
lodomethane		10.0	9.3	93	9.4	94	1	20	50-150	E4
trans-1,2-Dichloroethene		10.0	9.5	95	9.8	98	3	20	74-124	
Tert-butylmethylether		10.0	9.8	98	9.9	99	1	20	75-119	
1,1-Dichloroethane		10.0	9.6	96	9.8	98	2	20	78-121	-
Vinyl acetate		10.0	10.8	108	10.8	108	0	20	52-129	<b>E</b> 4
2,2-Dichloropropane		10.0	10.0	100	10.0	100	0	20	61-137	
cis-1,2-Dichloroethene		10.0	10.1	101	10.3	103	2	20	80-118	
2-Butanone		50.0	47.8	96	50.8	102	6	20	76-122	
Bromochloromethane		10.0	9.5	95	10.0	100	5	20	82-118	
Chloroform		10.0	9.4	94	9.7	97	3	20	73-125	
1,1,1-Trichloroethane		10.0	9.6	96	9.8	98	2	20	76-124	-
1,1-Dichloropropene		10.0	9.8	98	10.1	101	3	20	80-119	
Carbon tetrachloride		10.0	9.6	96	10.0	100	4	20	68-135	
Benzene		10.0	10.0	100	10.1	101	1	20	81-119	
1,2-Dichloroethane		10.0	9.6	96	9.9	99	3	20	75-122	
Trichloroethene		10.0	9.7	97	9.9	99	2	20	79-118	

Comments:		

# ORGANIC ANALYSES DATA SHEET 7 LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE

Analytical Method: SW8260		AAB #: <u>D0602022</u>	2
Lab Name: Columbia Analytical Services/Redd	ing	· · · · · · · · · · · · · · · · · · ·	
Concentration Units (ug/L or mg/kg): UG/L		<del>-</del>	%Solids:
Parent Field Sample ID: M1212W01	BS ID:	M1212W01LCS	BSD ID: M1212W01LCSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
1,2-Dichloropropane		10.0	9.6	96	9.8	98	2	20	82-115	
Dibromomethane		10.0	9.9	99	10.0	100	1	20	84-116	
Bromodichloromethane		10.0	9.7	97	10.0	100	3	20	81-122	
cis-1,3-Dichloropropene		10.0	10.1	101	10.4	104	3	20	78-118	
4-methyl-2-pentanone		50.0	49.1	98	52.5	105	7	20	81-127	
Toluene		10.0	9.5	95	9.8	98	3	20	83-116	
trans-1,3-Dichloropropene		10.0	9.8	98	9.9	99	1	20	73-122	
1,1,2-Trichloroethane		10.0	9.8	98	9.3	93	5	. 20	83-120	
Tetrachloroethene		10.0	10.0	100	10.1	101	1	20	82-118	
1,3-Dichloropropane		10.0	9.8	98	10.0	100	2	20	82-119	
2-Hexanone		50.0	47.0	94	50.8	102	8	20	81-130	
Dibromochloromethane		10.0	9.6	96	9.9	99	3	20	79-124	
1,2-Dibromoethane		10.0	9.8	98	10.1	101	3	20	82-116	
Chlorobenzene		10.0	9.8	98	10.0	100	2	20	86-114	
1,1,1,2-Tetrachloroethane		10.0	9.5	95	9.8	98	3	20	79-122	
Ethylbenzene		10.0	10.0	100	10.1	101	1	20	86-116	
Xylene (total)		30.0	29.5	98	30.2	101	. 2	20	85-117	
Styrene		10.0	10.0	100	10.3	103	3	20	84-119	-
Bromoform		10.0	9.0	90	9.6	96	6	20	71-133	
Isopropylbenzene		10.0	10.2	102	10.4	104	2	20	77-117	
1,1,2,2-Tetrachloroethane		10.0	9.6	96	- 10.0	100	4	20	80-117	
Bromobenzene		10.0	9.9	99	10.1	101	2	20	84-120	
1,2,3-Trichloropropane		10.0	9.6	96	9.8	98	2	20	81-122	E4
n-Propylbenzene		10.0	10.1	101	10.0	100	1	20	. 87-117	
2-Chlorotoluene		10.0	10.1	101	10.1	101	0	20	87-119	
1,3,5-Trimethylbenzene		10.0	10.1	101	9.9	99	2	20	83-120	

Comments:		
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# ORGANIC ANALYSES DATA SHEET 7 LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE

Analytical Method: SW826	50	·	A	AAB #:	D0602022	2	Section and the section of the secti			
Lab Name: Columbia Ana	alytical Serv	vices/Redd	ling							
Concentration Units (ug/L o	r mg/kg):	UG/L		-		%Soli	ds:			
Parent Field Sample ID: MI	1212W01	··········	BS ID:	M1212	W01LCS		BSD II	D: <u>M1212</u>	W01LCSI	)
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
-Chlorotoluene		10.0	10.0	100	10.0	100	0	20	86-118	
ert-Butylbenzene		10.0	8.7	87	8.9	89	2	20	82-122	
,2,4-Trimethylbenzene		10.0	10.2	102	10.2	102	0	20	86-121	
ec-Butylbenzene		10.0	10.6	106	10.6	106	0	20	84-128	
,3-Dichlorobenzene		10.0	9.9	99	10.0	100	. 1	20	85-119	
-IsopropyItoluene		10.0	10.1	101	10.1	101	0	20	84-121	
,4-DichIorobenzene		10.0	9.9	99	10.0	100	1	20	84-118	
-Butylbenzene		10.0	9.8	98	9.8	98	0	20	81-123	· · · · · · · · · · · · · · · · · · ·
,2-Dichlorobenzene		10.0	10.0	100	9.9	99	1	20	85-117	
,2-Dibromo-3-chloropropane		40.0	35.8	90	37.8	94	5	20	67-121	
,2,4-Trichlorobenzene		10.0	9.5	95	9.2	92	3	20	69-128	
lexachlorobutadiene		10.0	9.8	98	9.6	96	2	20	71-135	
Naphthalene		10.0	9.7	97	9.7	97	0	20	60-131	
,2,3-Trichlorobenzene		10.0	9.2	92	8.9	89	3	20	69-130	
		·								
Comments:										

Analytical Method: SW8260	AAB #	#: <u>D0602022</u>			
Lab Name: Columbia Analytical Services/Reddin	g				
Concentration Units (ug/L or mg/kg): UG/L		%So	olids:		
Parent Field Sample ID: ASF-126A-6D2	AS ID: ASE	-126A-6D2MS	MSD ID:	ASF-126A.	-6D2MSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Dichlorodifluoromethane		10.0	12.5	125	12.2	122	2	20	27-158	
Chloromethane		10.0	11.0	110	10.6	106	4	20	51-137	
Vinyl chloride	1.7	10.0	12.2	105	12.4	107	2	20	57-137	
Bromomethane		10.0	11.2	112	10.8	108	4	20	44-156	
Chloroethane		10.0	11.6	116	11.4	114	2	20	60-140	
Trichlorofluoromethane		10.0	10.9	109	11.8	118	8	20	54-146	
1,1-Dichloroethene	3.0	10.0	13.9	109	13.7	107	1	20	70-130	
Acetone		50.0	50.2	100	47.4	95	6	20	55-137	
Carbon disulfide		10.0	9.0	90	8.3	83	8	20	50-127	
Methylene chloride		10.0	10.2	102	10.0	100	2	20	73-121	
Iodomethane		10.0	9.8	98	9.7	97	1	20	50-150	E4
trans-1,2-Dichloroethene		10.0	10.0	100	9.8	98	2	20	74-124	·
Tert-butylmethylether	2.6	10.0	12.6	100	12.2	96	3	20	75-119	
1,1-Dichloroethane	19.8	10.0	29.2	94	29.1	93	0	20	78-121	
Vinyl acetate		10.0	10.4	104	10.0	100	4	20	52-129	E4
2,2-Dichloropropane		10.0	9.5	95	9.4	94	1	20	61-137	
cis-1,2-Dichloroethene	0.86	10.0	11.4	105	11.1	102	3	20	80-118	
2-Butanone		50.0	53.2	106	49.6	99	7	20	76-122	
Bromochloromethane		10.0	10.0	100	10.0	100	0	20	82-118	
Chloroform		10.0	9.9	99	9.8	98	1	20	73-125	
1,1,1-Trichloroethane	0.44	10.0	10.1	97	10.0	96	1	- 20	76-124	
1,1-Dichloropropene		10.0	10.3	103	10.2	102	1	20	80-119	
Carbon tetrachloride		10.0	9.1	91	9.2	92	1	20	68-135	
Benzene	0.15	10.0	10.5	104	10.3	102	2	20	81-119	-
1,2-Dichloroethane		10.0	10.2	102	9.7	97	5	20	75-122	
Trichloroethene	1.2	10.0	11.2	100	11.0	98	2	20	79-118	

Comments:		
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Analytical Method: SW8260	I	AAB #:D0602022	CONTRACTOR AND STATE OF THE STA
Lab Name: Columbia Analytical Services/Reddi	ng		
Concentration Units (ug/L or mg/kg): UG/L		- %Soli	ds:
Parent Field Sample ID: ASE-126A-6D2	MS ID:	ASE-126A-6D2MS	MSD ID: ASE-126A-6D2MSD

	Parent		Spiked		Duplicat					
Analyte	Sample	Spike	Sample	%R	Spike	%R	%RPD	Control	Control	Q
	Result	Added	Result		Sample			Limits	Limits	
					Result			%RPD	%R	
1,2-Dichloropropane		10.0	10.0	100	9.6	96	4	20	82-115	
Dibromomethane		10.0	10.1	101	9.8	98	3	20	84-116	
Bromodichloromethane		10.0	9.4	94	9.3	93	1	20	81-122	
cis-1,3-Dichloropropene	-	10.0	9.7	97	9.4	94	3	20	78-118	-
4-methyl-2-pentanone		50.0	53.3	107	50.2	100	6	20	81-127	
Toluene		10.0	9.9	99	10.0	100	1	20	83-116	
trans-1,3-Dichloropropene		10.0	9.4	94	9.0	90	4	20	73-122	
1,1,2-Trichloroethane		10.0	10.0	100	9.8	98	2	20	83-120	
Tetrachloroethene	0.29	10.0	10.5	102	10.5	102	0	20	82-118	
1,3-Dichloropropane		10.0	10.2	102	9.8	98	4	20	82-119	
2-Hexanone		50.0	52.5	105	49.0	98	7	20	81-130	
Dibromochloromethane		10.0	8.9	89	8.6	86	3	20	79-124	
1,2-Dibromoethane		10.0	10.2	102	9.8	98	4	20	82-116	
Chlorobenzene		10.0	10.3	103	10.2	102	1	20	86-114	
1,1,1,2-Tetrachloroethane		10.0	9.4	94	9.4	94	0	20	79-122	
Ethylbenzene		10.0	10.3	103	10.4	104	1	20	86-116	
Xylene (total)		30.0	30.9	103	30.7	102	1	20	85-117	
Styrene		10.0	10.2	102	10.1	101	1	20	84-119	
Bromoform		10.0	7.8	78	7.5	. 75	4	20	71-133	
Isopropylbenzene	0.44	10.0	11.0	106	11.0	106	0	20	77-117	
1,1,2,2-Tetrachloroethane		10.0	10.3	103	10.2	102	1	20	80-117	-
Bromobenzene		10.0	10.3	103	10.2	102	1	20	84-120	
1,2,3-Trichloropropane		10.0	10.4	104	9.9	99	5	20	81-122	E4
n-Propylbenzene	0.60	10.0	10.7	101	11.1	105	4	20	87-117	
2-Chlorotoluene		10.0	10.1	101	10.3	103	2	20	87-119	
1,3,5-Trimethylbenzene		10.0	10.4	104	9.9	99	5	20	83-120	

Comments:	

Analytical Method: SW826	0		. · · A	AAB#:	D0602022	2				
Lab Name: Columbia Ana	lytical Serv	vices/Redd	ling							
Concentration Units (ug/L or	mg/kg):	UG/L				%Soli	ds:			
Parent Field Sample ID: AS	E-126A-6I	02	MS ID:	ASE-1	26A-6D2M	IS	MSD II	D: <u>ASE-1</u>	26A-6D2N	MSD
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
4-Chlorotoluene		10.0	10.3	103	10.5	105	2	20	86-118	
tert-Butylbenzene		10.0	10.6	106	11.0	110	4	20	82-122	
1,2,4-Trimethylbenzene	0.17	10.0	10.6	104	10.8	106	2	20	86-121	
sec-Butylbenzene	0.52	10.0	11.3	108	11.6	111	3	20	84-128	
1,3-Dichlorobenzene		10.0	10.1	101	10.3	103	2	20	85-119	
p-Isopropyltoluene		10.0	10.3	103	10.6	106	3	20	84-121	
1,4-Dichlorobenzene		10.0	10.2	102	10.5	105	3	20	84-118	
n-Butylbenzene		10.0	10.0	100	10.4	104	4	20	81-123	
1,2-Dichlorobenzene		10.0	10.3	103	10.3	103	0	20	85-117	
1,2-Dibromo-3-chloropropane		40.0	37.2	93	36.0	90	3	20	67-121	
1,2,4-Trichlorobenzene		10.0	9.7	97	9.8	98	1	20	69-128	
Hexachlorobutadiene		10.0	9.7	97	9.9	99	2	20	71-135	
Naphthalene	1.1	10.0	11.7	106	11.7	106	0	20	60-131	·
1,2,3-Trichlorobenzene		10.0	9.2	92	9.5	95	3	20	69-130	
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Comments:						-				

# ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Metho	od: <u>SW82</u>	2.60	AAB#:	D0602022	
Lab Name: Co	lumbia Ana	lytical Services/Reddin	ng		
Instrument ID #:	MSM	DB-624			

Field Sample ID/Std ID/	Laboratory	Date Analysis	Time Analysis	Date Analysis	Time Analysis
Blank ID/QC Sample ID	File ID	Started	Started	Completed	Completed
VSTD00.5	M065370	12/05/06	1545	12/05/06	1605
VSTD001	M065371	12/05/06	1606	12/05/06	1626
VSTD005	M065372	12/05/06	1628	12/05/06	1648
VSTD010	M065373	12/05/06	1649	12/05/06	1709
VSTD020	M065374	12/05/06	1711	12/05/06	1731
VSTD050	M065375	12/05/06	1732	12/05/06	1752
VSTD100	M065376	12/05/06	1754	12/05/06	1814
VSTD150	M065377	12/05/06	1815	12/05/06	1835
QCALTSTD4	M065380	12/05/06	1920	12/05/06	1940
VSTD10M	M065468	12/12/06	0928	12/12/06	0948
M1212W01LCSD	M065470	12/12/06	1015	12/12/06	1035
M1212W01LCS	M065472	12/12/06	1058	12/12/06	1118
M1212W01	M065474	12/12/06	1141	12/12/06	1201
TB-120706	M065477	12/12/06	1246	12/12/06	1306
ASE-126A-6D2	M065478	12/12/06	1307	12/12/06	1327
ASE-97A-6D2	M065479	12/12/06	1328	12/12/06	1348
BC-8B-6D2	M065480	12/12/06	1350	12/12/06	1410
ASE-112A-6D2	M065481	12/12/06	1411	12/12/06	1431
ASE-105A-6D2	M065482	12/12/06	1435	12/12/06	1455
PL-503-6D2	M065483	12/12/06	1456	12/12/06	1516
ASE-103A-6D2	M065484	12/12/06	1518	12/12/06	1538
ASE-100A-6D2	M065485	12/12/06	1539	12/12/06	1559
ASE-101A-6D2	M065486	12/12/06	1601	12/12/06	1621
ASE-102A-6D2	M065487	12/12/06	1622	12/12/06	1642
ASE-110A-6D2	M065488	12/12/06	1643	12/12/06	1703
BC-7A-6D2	M065489	12/12/06	1705	12/12/06	1725

Comments:		

# ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: SW826	60	AAB #:D06	502022	<b></b>	
Lab Name: Columbia Analy	tical Services/Redding				
nstrument ID #: MSM	DB-624				
Field Sample ID/Std ID/	Laboratory	Date Analysis	Time Analysis	Date Analysis	Time Analysi
Blank ID/QC Sample ID	File ID	Started	Started	Completed	Completed
ASE-127A-6D2	M065490	12/12/06	1726	12/12/06	1746
ASE-90A-6D2	M065491	12/12/06	1748	12/12/06	1808
ASE-90A-6D2DL	M065492	12/12/06	1809	12/12/06	1829
ASE-89A-6D2	M065493	12/12/06	1831	12/12/06	1851
ASE-89A-6D2DL	M065494	12/12/06	1852	12/12/06	1912
ASE-126A-6D2MS	M065496	12/12/06	1935	12/12/06	1955
ASE-126A-6D2MSD	M065497	12/12/06	1956	12/12/06	2016
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Comments:					
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# ORGANIC ANALYSES DATA SHEET APPENDIX A SURROGATE RESULTS

Analytical Method: SW8260	AAB #: <u>D0602022</u>	
Lab Name: Columbia Analytical Services/Redding		
Matrix: Water		

Field/QC Sample 1D	S1	S2	S3	S4	S5	S6	S7	S8	Q
M1212W01LCSD	99	100	99						
M1212W01LCS	102	100	98						
M1212W01	97	98	96						
TB-120706	98	97	98				. (		
ASE-126A-6D2	94	94	96						
ASE-97A-6D2	103	101	102			-			
BC-8B-6D2	97	96	97						
ASE-112A-6D2	92	91	91						
ASE-105A-6D2	98	97	96						
PL-503-6D2	99	. 97	98						
ASE-103A-6D2	98	98	99						
ASE-100A-6D2	102	97	100						
ASE-101A-6D2	98	99	99				·		
ASE-102A-6D2	98	98	97						
ASE-110A-6D2	98	99	100						
BC-7A-6D2	100	97.	98						
ASE-127A-6D2	98	97	99						
ASE-90A-6D2	97 .	98	96						
ASE-90A-6D2DL	97	97	98						
ASE-89A-6D2	98	100	96						
ASE-89A-6D2DL	96	96	96						
ASE-126A-6D2MS	99	101	98						
ASE-126A-6D2MSD	100	98	98						

S1:	4-Bromofluorobenzene - SS	82-124
S2:	Dibromofluoromethane - SS	84-127
S3:	Toluene-d8 - SS	80-117

Comments:		

# HPLC POLYNUCLEAR AROMATIC HYDROCARBONS

### ORGANIC ANALYSES DATA PACKAGE

Analytical Method:	SW8310	AAB #: <u>D0602022</u>
Lab Name: Columb	pia Analytical Services/Redding	
Base/Command: HO	ONEYWELL SKY HARBOR	
Project: Sky Har	bor	
1	Field Sample ID	Lab Sample ID
<u>.</u>	ASE-126A-6D2 ASE-126A-6D2MS ASE-126A-6D2MSD ASE-127A-6D2	D0602022-002 D0602022-002MS D0602022-002MSD D0602022-016
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- - -		
- - -		
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Comments:		
completeness, for oth and in the computer-	ner than the conditions detailed above. Rel	onditions of the contract, both technically and for ease of the data contained in this hardcopy data package an authorized by the Laboratory Manager or the
Signature:	Name:	Sylvia Chen
Date: 12	/23/06 Title:	Scientist

RDD-061222:SC:BS-1135PST-SR:D0602022-D0602022-K

# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8310	Preparatory Method:	SW3520	AAB #:D0602022
Lab Name: Columbia Analytical Services/	Redding		
Field Sample ID: ASE-126A-6D2	Lab Sample ID:	D0602022-002	Matrix: Water
% Solids:		Initial Calib	oration ID: 11/02/06LCI
Date Received: 12/09/06 Date	e Extracted: 12/11/06	Date Ana	lyzed: 12/I4/06
Concentration Units (ug/L or ug/Kg dry weig	ght): UG/L	Sample Volume:	1.050 L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.048	0.50	0.65	1	0.94	
Fluorene	0.0100	0.10	ND	1		
Phenanthrene	0.0066	0.10	ND	1		
Anthracene	0.0051	0.10	ND	1		
Fluoranthene	0.0074	0.10	ND	1		
Pyrene	0.0100	0.10	ND	1		
Benzo(a)anthracene	0.016	0.10	ND	1		
Chrysene	0.014	0.10	ND	1		
Benzo(b)fluoranthene	0.0084	0.10	ND	1		
Benzo(k)fluoranthene	0.011	0.10	ND	1		
Benzo(a)pyrene	0.014	0.10	ND	1		
Dibenzo(a,h)anthracene	0.017	0.10	ND	1		
Benzo(g,h,i)perylene	0.016	0.10	ND	11		
Indeno(1,2,3-c,d)pyrene	0.016	0.10	ND	1		
Acenaphthylene	0.19	1.0	ND	1		
Acenaphthene	0.058	0.50	ND	1		

Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	91	25-157	
			,

Comments:	

# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8310	Preparatory Method:	SW3520 A	AB #: D0602022
Lab Name: Columbia Analytical Services/F	Redding		
Field Sample ID: ASE-127A-6D2	Lab Sample ID:	D0602022-016 N	fatrix: Water
% Solids:		Initial Calibra	tion ID: 11/02/06LCI
Date Received: 12/09/06 Date	Extracted: 12/11/06	Date Analyz	zed: 12/14/06
Concentration Units (ug/L or ug/Kg dry weig	ht): UG/L	Sample Volume:	1.050 L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.048	0.50	0.20	1		E4
Fluorene	0.0100	0.10	0.020	1		E4
Phenanthrene	0.0066	0.10	ND	1		
Anthracene	0.0051	0.10	ND	1		
Fluoranthene	0.0074	0.10	ND	1		
Pyrene	0.0100	0.10	ND	1		
Benzo(a)anthracene	0.016	0.10	ND	1		
Chrysene	0.014	0.10	ND	1		
Benzo(b)fluoranthene	0.0084	0.10	ND	1		
Benzo(k)fluoranthene	0.011	0.10	ND	1		
Benzo(a)pyrene	0.014	0.10	ND	1		
Dibenzo(a,h)anthracene	0.017	0.10	ND	1		
Benzo(g,h,i)perylene	0.016	0.10	ND	1		
Indeno(1,2,3-c,d)pyrene	0.016	0.10	ND	11		
Acenaphthylene	0.19	1.0	ND	1		
Acenaphthene	0.058	0.50	ND	1		

Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	62	25-157	

Comments:			

# ORGANIC ANALYSES DATA SHEET 6 BLANKS

Analytical Method: SW8310	AAB #:
Lab Name: Columbia Analytical Services/Redding	· .
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: NWB11211
Lab Sample ID: NWB11211	
Initial Calibration ID: 11/02/06LCI	

MDL	Method Blank	RL	Q
0.048	ND	0.50	
0.0100	ND	0.10	
0.0066	ND	0.10	
0.0051	ND	0.10	
0.0074	ND	0.10	
0.0100	ND	0.10	
0.016	ND	0.10	
0.014	ND	0.10	
0.0084	ND	0.10	
0.011	ND	0.10	
0.014	ND	0.10	
0.017	ND	0.10	
0.016	ND	0.10	
0.016	ND	0.10	
0.19	ND	1.0	
0.058	ND	0.50	
			***
	0.048 0.0100 0.0066 0.0051 0.0074 0.0100 0.016 0.014 0.0084 0.011 0.014 0.017 0.016 0.016 0.016	0.048         ND           0.0100         ND           0.0066         ND           0.0051         ND           0.0074         ND           0.0100         ND           0.016         ND           0.014         ND           0.0084         ND           0.011         ND           0.014         ND           0.017         ND           0.016         ND           0.016         ND           0.19         ND	0.048         ND         0.50           0.0100         ND         0.10           0.0066         ND         0.10           0.0051         ND         0.10           0.0074         ND         0.10           0.0100         ND         0.10           0.016         ND         0.10           0.014         ND         0.10           0.0084         ND         0.10           0.011         ND         0.10           0.014         ND         0.10           0.017         ND         0.10           0.016         ND         0.10           0.016         ND         0.10           0.19         ND         0.10

Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	86	25-157	

Comments:				
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### ORGANIC ANALYSES DATA SHEET 6 BLANKS

Analytical Method: SW8310	AAB #:D0602022	
Lab Name: Columbia Analytical Services/Redding		
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: NWB11219	
Lab Sample ID: NWB11219		
Initial Calibration ID: 11/02/06LCI		

Analyte	MDL	Method Blank	RL	Q
Naphthalene	0.048	ND	0.50	
Fluorene	0.0100	ND	0.10	
Phenanthrene	0.0066	ND	0.10	
Anthracene	0.0051	ND	0.10	
Fluoranthene	0.0074	ND	0.10	
Pyrene	0.0100	ND	0.10	
Benzo(a)anthracene	0.016	ND	0.10	
Chrysene	0.014	ND	0.10	
Benzo(b)fluoranthene	0.0084	ND	0.10	
Benzo(k)fluoranthene	0.011	ND	0.10	
Benzo(a)pyrene	0.014	ND	0.10	
Dibenzo(a,h)anthracene	0.017	ND	0.10	
Benzo(g,h,i)perylene	0.016	ND	0.10	
Indeno(1,2,3-c,d)pyrene	0.016	ND	0.10	
Acenaphthylene	0.19	ND	1.0	
Acenaphthene	0.058	ND	0.50	

Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	74	25-157	
		-	

Comments:		

Analytical Method: SW8310	AAB #: _D0602022
Lab Name: Columbia Analytical Ser	vices/Redding
LCS ID: NWB11211LCS	Concentration Units (ug/L or mg/kg): UG/L
Date Extracted: 12/11/06	Date Analyzed: 12/14/06
Initial Calibration ID: 11/02/06LCI	

Analyte	Expected	Found	%R	Control Limits	Q
Naphthalene	20.00	15.86	79	33-120	
Fluorene	4.000	3.585	90	53-125	
Phenanthrene	2.000	1.754	88	40-120	
Anthracene	2.000	1.670	84	54-125	
Fluoranthene	2.000	1.757	88	42-125	
Pyrene	2.000	1.855	93	55-125	
Benzo(a)anthracene	2.000	1.729	86	39-135	
Chrysene	2.000	1.872	94	59-134	
Benzo(b)fluoranthene	2.000	1.766	88	31-137	
Benzo(k)fluoranthene	2.000	1.809	90	60-129	
Benzo(a)pyrene	2.000	I.701	85	52-125	
Dibenzo(a,h)anthracene	4.000	3.442	86	51-125	·
Benzo(g,h,i)perylene	4.000	3.370	84	34-120	
Indeno(1,2,3-c,d)pyrene	2.000	1.843	92	55-125	
Acenaphthene	20.00	16.39	82	43-130	
Acenaphthylene	40.00	32.01	80	40-121	
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Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	82	25-157	

Comments:			
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Analytical Method: SW8310	AAB #: <u>D0602022</u>
Lab Name: Columbia Analytical Ser	vices/Redding
LCS ID: NWB11219LCS	Concentration Units (ug/L or mg/kg): UG/L
Date Extracted: 12/19/06	Date Analyzed: 12/20/06
Initial Calibration ID: 11/02/06LCI	

Analyte	Expected	Found	%R	Control Limits	Q
Naphthalene	20.00	16.39	82	33-120	
Fluorene	4.000	3.732	93	53-125	
Phenanthrene	2.000	1.830	92	40-120	
Anthracene	2.000	1.779	89	54-125	
Fluoranthene	2.000	1.964	98	42-125	
Pyrene	2.000	2.125	106	55-125	
Benzo(a)anthracene	2.000	1.843	92	39-135	
Chrysene	2.000	1.948	97	59-134	
Benzo(b)fluoranthene	2.000	1.814	91	31-137	-
Benzo(k)fluoranthene	2.000	1.862	93	60-129	
Benzo(a)pyrene	2.000	1.814	91	52-125	
Dibenzo(a,h)anthracene	4.000	3.462	87	51-125	
Benzo(g,h,i)perylene	4.000	3.738	93	34-120	
Indeno(1,2,3-c,d)pyrene	2.000	2.055	103	55-125	
Acenaphthene	20.00	16.52	83	43-130	
Acenaphthylene	40.00	32.45	81	40-121	
		-			

Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	85	25-157	

Comments:	

Analytical Method: SW831  Lab Name: Columbia Anal		vices/Redo		AAB#:	D0602022	2	-			
Concentration Units (ug/L or				_		%Soli	ds:			
Parent Field Sample ID: ASE-126A-6D2 MS ID: ASE-126A-6D2MS M					MSD II	D: <u>ASE-1</u>	26A-6D2N	MSD		
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Naphthalene	0.6480	19.05	17.53	89	17.92	. 91	2	30	33-120	H4
Fluorene	0.03956	3.810	3.817	99	3.912	102	2	30	53-125	H4
Phenanthrene	0.02118	1.905	1.893	98	1.933	100	2	30	40-120	H4
Anthracene		1.905	1.822	96	1.898	100	4	30	54-125	H4
Fluoranthene		1.905	1.922	101	2.089	110	8	30	42-125	H4
Pyrene		1.905	2.015	106	2.130	112	6	30	55-125	H4
Benzo(a)anthracene		1.905	1.862	98	1.945	102	4	30	39-135	<u>H4</u>
Chrysene		1.905	1.983	104	2.030	107	2	30	59-134	H4
Benzo(b)fluoranthene	0.9216	1.905	1.845	48	1.927	53	4	30	31-137	H4
Benzo(k)fluoranthene		1.905	1.900	100	1.920	101	1	30	60-129	H4
Benzo(a)pyrene	0.008934	1.905	1.888	99	1.930	101	2	30	52-125	H4
Dibenzo(a,h)anthracene	0.4504	3.810	3.581	94	3.716	98	4	30	51-125	H4
Benzo(g,h,i)perylene	0.1236	3.810	3.898	99	3.823	97	2	30	34-120	H4
Indeno(1,2,3-c,d)pyrene	0.1852	1.905	2.126	102	2.108	101	1	30	55-125	H4
Acenaphthene		19.05	17.04	89	17.22	90	1	30	43-130	H4
Acenaphthylene		38.10	33.22	87	32.76	86	1	30	40-121	H4
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Comments:										

### ORGANIC ANALYSES DATA SHEET 9 HOLDING TIMES

Analytical Met	hod: SW8310	AAB #:	D0602022
Lab Name: (	Columbia Analytical Services/Redding		

			1st	Max.	1 st	2nd	Max.	2nd		Max.	Time	Q
Field Sample ID	Date	Date	Date	Holding	Time	Date	Holding	Time	Date	Holding	Held	
	Collected	Received	Prepared	Time 1	Held	Prepared	Time 2	Held	Analyzed	Time A	Anal.	
ASE-126A-6D2	12/08/06	12/09/06	12/11/06	7	3	N/A	N/A	N/A	12/14/06	40	3	
ASE-126A-6D2MS	12/08/06	12/09/06	12/11/06	7	3	N/A	N/A	N/A	12/14/06	40	3	
ASE-126A-6D2MSD	12/08/06	12/09/06	12/19/06	7	11	N/A	N/A	N/A	12/20/06	40	1	*
ASE-127A-6D2	12/08/06	12/09/06	12/11/06	7	3	N/A	N/A	N/A	12/14/06	40	3	
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Comments:				
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# ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method	d: <u>SW</u>	78310	AAB #:	D0602022	
Lab Name: Col	umbia A	nalytical Services/Red	ding		
Instrument ID #:	LCI	FL			

Field Sample ID/Std ID/ Blank ID/QC Sample ID	Laboratory File ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
KSTD1	I1102006	11/02/06	1334	11/02/06	1404
KSTD2	I1102007	11/02/06	1405	11/02/06	1435
KSTD3	I1102008	11/02/06	1436	11/02/06	1506
KSTD4	11102009	11/02/06	1506	11/02/06	1536
KSTD5	11102010	11/02/06	1537	11/02/06	1607
QCALTSTD3	11102011	11/02/06	1608	11/02/06	1638
KSTD4	I1214003	12/14/06	1218	12/14/06	1248
NWB11211	I1214004	12/14/06	1255	12/14/06	1325
NWB11211LCS	11214005	12/14/06	1326	12/14/06	1356
ASE-126A-6D2	I12I4007	12/14/06	1427	12/14/06	1457
ASE-126A-6D2MS	I1214008	12/14/06	1458	12/14/06	1528
KSTD3	I1214010	12/14/06	1559	12/14/06	1629
ASE-127A-6D2	11214018	12/14/06	2014	12/14/06	2044
KSTD4	11214020	12/14/06	2115	12/14/06	2145
KSTD3	I1220005	12/20/06	1316	12/20/06	1346
ASE-126A-6D2MSD	I1220006	12/20/06	1515	12/20/06	1545
NWB11219	I1220007	12/20/06	1546	12/20/06	1616
NWB11219LCS	I1220008	12/20/06	1617	12/20/06	1647
KSTD4	I1220013	12/20/06	1850	12/20/06	1920

Comments:		

# ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method	l: <u>SW</u>	8310	AAB #: .	D0602022	
Lab Name: Colu	ımbia Aı	nalytical Services/Redding			
Instrument ID #:	LCI	UV	_		

Field Sample ID/Std ID/	Laboratory	Date Analysis	Time Analysis	Date Analysis	Time Analysis
Blank ID/QC Sample ID	File ID	Started	Started	Completed	Completed
KSTD1	I1102006	11/02/06	1334	11/02/06	1404
KSTD2	I1102007	11/02/06	1405	11/02/06	1435
KSTD3	I1102008	11/02/06	1436	11/02/06	1506
KSTD4	I1102009	11/02/06	1506	11/02/06	1536
KSTD5	I11020I0	11/02/06	1537	11/02/06	1607
QCALTSTD3	I1102011	11/02/06	1608	11/02/06	1638
KSTD4	I1214003	12/14/06	1218	12/14/06	1248
NWB11211	I1214004	12/14/06	1255	12/14/06	1325
NWB11211LCS	I1214005	12/14/06	1326	12/14/06	1356
ASE-126A-6D2	I1214007	12/14/06	1427	12/14/06	1457
ASE-126A-6D2MS	I1214008	12/14/06	1458	12/14/06	1528
KSTD3	I1214010	12/14/06	1559	12/14/06	1629
ASE-127A-6D2	I1214018	12/14/06	2014	12/14/06	2044
KSTD4	I1214020	12/14/06	2115	12/14/06	2145
KSTD3	I1220005	12/20/06	1316	12/20/06	1346
ASE-126A-6D2MSD	I1220006	12/20/06	1515	12/20/06	1545
NWB11219	I1220007	12/20/06	1546	12/20/06	1616
NWB11219LCS	I1220008	12/20/06	1617	12/20/06	1647
KSTD4	I1220013	12/20/06	1850	12/20/06	1920
		,			

Comments:		

# ORGANIC ANALYSES DATA SHEET APPENDIX A SURROGATE RESULTS

Analytical Method: SW8310		·	AA	AB #: <u>D0</u>	602022	-			
Lab Name: Columbia Analy	tical Servic	es/Reddir	ıg						
Matrix: Water						-			
Field/QC Sample ID	S1	S2	S3	S4	S5	S6	S7	S8	Q
NWB11211	86								
NWB11211LCS	82								
ASE-126A-6D2	91								
ASE-126A-6D2MS	90					***************************************			
ASE-127A-6D2	62								
ASE-126A-6D2MSD	93								
NWB11219	74							'	
NWB11219LCS	85								
-									
								-	
									-
								7	
							:		
S1: Terphenyl-d14 - SS		25	-157						
Comments:									

Redding, California 96003



December 27, 2006

Service Request No: D0602039

Shane Lowe CH2M Hill 2625 S. Plaza Drive Suite 300 Tempe, AZ 85282

RE: Sky Harbor/2959482

Dear Shane:

Enclosed are the results of the sample(s) submitted to our laboratory on December 12, 2006. For your reference, these analyses have been assigned our service request number D0602039.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 105. You may also contact me via email at MFesler@redding.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

all the

Mark Fesler

**Project Chemist** 

CC: Terri Krauss

Page 1 of <u>80</u>

### **Current CAS Redding Accreditation Programs**

### Federal and National Programs

• U.S Air Force, Air Force Center for Environmental Excellence (AFCEE)

Approved laboratory for Wastewater and Hazardous Waste

• U.S. Army Corps of Engineers – MRD, HTRW Mandatory Center of Expertise Validated for Wastewater and Hazardous Waste

• Department of the Navy, Naval Facilities Engineering Service Center (NFESC)

Approved laboratory for Wastewater and Hazardous Waste

### State and Local Programs

• State of Alaska, Department of Environmental Conservation Approved Laboratory for Contaminated Sites Lab ID UST-001

State of Arizona, Department of Health Services, Office of Laboratory Licensure
 Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste
 Lab ID AZ0604

 State of California, Department of Health Services, National Environmental Laboratory Accreditation Program (NELAP)

Approved Laboratory for Drinking Water, Wastewater and Hazardous Waste Lab ID 01105CA

Los Angeles County Sanitation District
 Approved Laboratory for Wastewater
 Lab ID 10243

• State of California, Department of Health Services, Environmental Laboratory Accreditation Program (ELAP)

Approved Laboratory for Microbiology of Drinking Water and Wastewater Lab ID 2635

State of Florida, Department of Health, Bureau of Laboratories (NELAP)
 Approved Environmental Testing Laboratory for Wastewater and Hazardous Waste Lab ID E87203

• State of Kansas, Department of Health and Environment (NELAP)

Approved Laboratory for Hazardous Waste

Lab ID E-10323

• State of Massachusetts, Department of Environmental Protection

Approved laboratory for Drinking Water and Wastewater Lab ID M-CA025

State of Oklahoma, Department of Environmental Quality

Approved Laboratory for General Water Quality/Sludge Testing Lab ID 9952

• State of Oregon, Environmental Laboratory Accreditation Program (ORELAP)

Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste Lab ID CA200004

• State of Utah, Department of Health, Bureau of Laboratory Improvement (NELAP)

Approved Laboratory for Wastewater and Hazardous Waste

Lab ID QUAL1

• State of Washington, Department of Ecology

Approved Laboratory for Wastewater and Hazardous Waste Lab ID C1234

• State of Wisconsin, Department of Natural Resources

Approved Laboratory for Wastewater and Hazardous Waste Lab ID 999767340

### Arizona Data Qualifiers

Revision 2.0, 11/26/2003

# Developed by the Sub-committee of the Arizona Environmental Laboratory Advisory Committee

### Microbiology:

- A1 = Too numerous to count.
- A2 = Sample incubation period exceeded method requirement.
- A3 = Sample incubation period was shorter than method requirement.
- A4 = Target organism detected in associated method blank.
- A5 = Incubator/water bath temperature was outside method requirements.
- A6 = Target organism not detected in associated positive control.
- A7 = Micro sample received without adequate headspace.

#### Method/calibration blank:

- B1 = Target analyte detected in method blank at or above the method reporting limit.
- B2 = Non-target analyte detected in method blank and sample, producing interference.
- B3 = Target analyte detected in calibration blank at or above the method reporting limit.
- B4 = Target analyte detected in blank at/above method acceptance criteria.
- B5 = Target analyte detected in method blank at or above the method reporting limit, but below trigger level or MCL.
- B6 = Target analyte detected in calibration blank at or above the method reporting limit, but below trigger level or MCL.
- B7 = Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above the concentration found in the method blank.

#### Confirmation:

- C1 = Confirmatory analysis not performed as required by the method.
- C3 = Qualitative confirmation performed.
- C4 = Confirmatory analysis was past holding time.
- C5 = Confirmatory analysis was past holding time. Original result not confirmed.
- C6 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the higher value was reported as there was no obvious chromatographic interference.
- C7 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic interference.

#### Dilution:

- D1 = Sample required dilution due to matrix.
- D2 = Sample required dilution due to high concentration of target analyte.
- D3 = Sample dilution required due to insufficient sample.
- D4 = Minimum reporting level (MRL) adjusted to reflect sample amount received and analyzed.

#### Estimated concentration:

- E1 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
- E2 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
- E3 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to holding time requirements.

### Arizona Data Qualifiers Revision 2.0, 11/26/2003

- E4 = Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL).
- E5 = Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL), but not confirmed by alternate analysis.
- E6 = Concentration estimated. Internal standard recoveries did not meet method acceptance criteria.
- E7 = Concentration estimated. Internal standard recoveries did not meet laboratory acceptance criteria.
- E8 = Analyte reported to MDL per project specification. Target analyte was not detected in the sample.

#### Hold time:

- H1 = Sample analysis performed past holding time.
- H2 = Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
- H3 = Sample was received and analyzed past holding time.
- H4 = Sample was extracted past required extraction holding time, but analyzed within analysis holding time.

#### BOD:

- K1 = The sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2 mg/L. Any reported result is an estimated value.
- K2 = The sample dilutions set up for the BOD analysis did not meet the criteria of a residual dissolved oxygen of at least 1 mg/L. Any reported result is an estimated value.
- K4 = The seed depletion was outside the method acceptance limits. The reported result is an estimated value.
- K5 = The dilution water D.O. depletion was > 0.2 mg/L.
- K6 = Glucose/glutamic acid BOD was below method acceptance criteria.
- K7 = A discrepancy between the BOD and COD results has been verified by reanalysis of the sample for COD.
- K8 = Glucose/glutamic acid BOD was above method acceptance levels.

### Laboratory fortified blank/blank spike:

- L1 = The associated blank spike recovery was above laboratory acceptance limits.
- L2 = The associated blank spike recovery was below laboratory acceptance limits.
- L3 = The associated blank spike recovery was above method acceptance limits.
- L4 = The associated blank spike recovery was below method acceptance limits.

#### Matrix spike:

- M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.
- M2 = Matrix spike recovery was low, the method control sample recovery was acceptable.
- M3 = The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
- M4 = The analysis of the spiked sample required a dilution such that the spike concentration was diluted below the reporting limit. The method control sample recovery was acceptable.
- M5 = Analyte concentration was determined by the method of standard addition (MSA).

### Arizona Data Qualifiers Revision 2.0, 11/26/2003

- M6 = Matrix spike recovery was high. Data reported per ADEQ policy 0154.000.
- M7 = Matrix spike recovery was low. Data reported per ADEQ policy 0154.000.

#### General:

- N1 = See case narrative.
- N2 = See corrective action report.
- N3 = The analysis meets all method requirements. See case narrative.

#### Sample quality:

- Q1 = Sample integrity was not maintained. See case narrative.
- Q2 = Sample received with headspace.
- Q3 = Sample received with improper chemical preservation.
- Q4 = Sample received and analyzed without chemical preservation.
- Q5 = Sample received with inadequate chemical preservation, but preserved by the laboratory.
- Q6 = Sample was received above recommended temperature.
- Q7 = Sample inadequately dechlorinated.
- Q8 = Insufficient sample received to meet method QC requirements. Batch QC requirements satisfies ADEQ policies 0154 and 0155.
- Q9 = Insufficient sample received to meet method QC requirements.
- Q10 = Sample received in inappropriate sample container.
- Q11 = Sample is heterogeneous. Sample homogeneity could not be readily achieved using routine laboratory practices.

#### **Duplicates:**

- R1 = RPD exceeded the method control limit. See case narrative.
- R2 = RPD exceeded the laboratory control limit. See case narrative.
- R4 = MS/MSD RPD exceeded the method control limit. Recovery met acceptance criteria.
- R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- R6 = LFB/LFBD RPD exceeded the method control limit. Recovery met acceptance criteria.
- R7 = LFB/LFBD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- R8 = Sample RPD exceeded the method control limit.
- R9 = Sample RPD exceeded the laboratory control limit.
- R10 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic problems.
- R11 = The RPD calculation for MS/MSD does not provide useful information due to the varying sample weights when Encore samplers/methanol field preserved samples are used.

#### Surrogate:

- S1 = Surrogate recovery was above laboratory acceptance limits, but within method acceptance limits.
- S3 = Surrogate recovery was above laboratory acceptance limits, but within method acceptance limits. No target analytes were detected in the sample.
- S4 = Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.
- S5 = Surrogate recovery was below laboratory acceptance limits, but within method acceptance limits.
- S6 = Surrogate recovery was below laboratory and method acceptance limits. Reextraction and/or reanalysis confirms low recovery caused by matrix effect.

### Arizona Data Qualifiers Revision 2.0, 11/26/2003

- S7 = Surrogate recovery was below laboratory and method acceptance limits. Unable to confirm matrix effect.
- S8 = The analysis of the sample required a dilution such that the surrogate recovery calculation does not provide any useful information. The method control sample recovery was acceptable.
- S10 = Surrogate recovery was above laboratory and method acceptance limits. See Case narrative.
- S11 = Surrogate recovery was high. Data reported per ADEQ policy 0154.000.
- S12 = Surrogate recovery was low. Data reported per ADEQ policy 0154.000.

### Method/analyte discrepancies:

- T1 = Method approved by EPA, but not yet licensed by ADHS.
- T2 = Cited ADHS licensed method does not contain this analyte as part of method compound list.
- T3 = Method not promulgated either by EPA or ADHS.
- T4 = Tentatively identified compound. Concentration is estimated and based on the closest internal standard.

#### Calibration verification:

- V1 = CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
- V2 = CCV recovery was above method acceptance limits. This target analyte was detected in the sample. The sample could not be reanalyzed due to insufficient sample.
- V3 = CCV recovery was above method acceptance limits. This target analyte was detected in the sample, but the sample was not reanalyzed. See case narrative.
- V4 = CCV recovery was below method acceptance limits. The sample could not be reanalyzed due to insufficient sample.
- V5 = CCV recovery after a group of samples was above acceptance limits. This target analyte was not detected in the sample. Acceptable per EPA Method 8000B.
- V6 = Data reported from one-point calibration criteria per ADEQ policy 0155.000.
- V7 = Calibration verification recovery was above the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
- V8 = Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.

#### Calibration:

- W1 = The % RSD for this compound was above 20%. The average % RSD for all compounds in the calibration met the 20% criteria as specified in EPA method 8000B.
- W2 = The % RSD for this compound was above 15%. The average % RSD for all compounds in the calibration met the 15% criteria as specified in EPA method 8260B/8270C.

Client:

Project:

Sky Harbor/2959482

Service Request: D0602039

### SAMPLE CROSS-REFERENCE

SAMPLE#	CLIENT SAMPLE ID	DATE	<u>TIME</u>
D0602039-001	TB121106	12/11/06	06:30
D0602039-002	PL-201A-6D2	12/11/06	07:19
D0602039-003	ASE-58A-6D2	12/11/06	07:53
D0602039-004	ASE-46A-6D2	12/11/06	06:48
D0602039-005	PL-504-6D2	12/11/06	06:58
D0602039-006	PL-2101-6D2	12/11/06	08:34
D0602039-007	ASE-54A-6D2	12/11/06	09:09
D0602039-008	PL-2102-6D2	12/11/06	09:50
D0602039-009	ASE-59A-6D2	12/11/06	11:59
D0602039-010	ASE-61A-6D2	12/11/06	10:33
D0602039-011	ASE-60A-6D2	12/11/06	11:10

# **CASE NARRATIVE**

#### COLUMBIA ANALYTICAL SERVICES, INC.

Client:

Honeywell International, Incorporated

Service Request No.: D0602039

Project:

Sky Harbor Sample Matrix: Aqueous

Date Received:

12/12/06

#### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables.

#### Sample Receipt

11 Aqueous samples were received for analysis at Columbia Analytical Services on 12/12/06.

No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4 degrees Celsius upon receipt at the laboratory.

#### Diesel Range Organics by EPA Method 8015B

No anomalies associated with the analysis of these samples by the above-mentioned method were observed.

### Volatile Organic Compounds by EPA Method 8260B

No anomalies associated with the analysis of these samples by the above-mentioned method were observed.

Approved by:	Marketon	Date:	12/2766	

CHAIN	OF	CHIST	FODV	DOCIN	AENTA	TION

						-			-		-				COC#: 37380-061211A
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3725 E Atlanta Ave		No. and College			Chair	OfC	Chain Of Custody / Analysis Request	Analysis	Redu	lest				<u> </u>	Page 1 of 1
Phone 602-437-0330														E	Project No.
Client Contact: (name, co., address)	ne, co., address)	Sampler: M. Wiese	M.Wiese	KBANOAL	MILL	Si	Site Name:	Sky Harbor AZ	bor AZ						
Jennifer Holland	-	Project Ni	Project Number: 2959460	19460		77	Location of Site:	te: Phoenix, AZ	c, AZ					<u> </u>	Job No.
CH2M HILL		Analysis Tur	Analysis Turnaround Times	61	-										
2625 South Plaza Dr STE 300	Dr STE 300	24 Hour -													
Tempe, AZ 85282	2	7 Day -										Control (I)			
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Location ID	Field Sample ID						13/2/61/37	2000						13	Lab Sample Numbers
¥	TB121106	Dec 11 2006	0%30	BLKWATER	WATER	3 ×	×	×							
	PL-201A-6D2	Dec 11 2006	6110	ΒM	WATER	5 X	×	x x							
ASE-58A	ASE-58A-6D2	Dec 11 2006	27.53	ΜS	WATER		×	××							
ASE-46A	ASE-46A-6D2	Dec 11 2006	O	BW	WATER		×	-+	1	1	$\dashv$				
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1	PL-2101-6D2	Dec 11 2006	204	GW.	WATER	1	×	-+	+	$\dagger$	$\frac{1}{1}$		$\frac{1}{2}$	1	
PI 2402	ASE-54A-602	Dec 11 2006	Q.	A .	WATER		×	×;	+	+	$\downarrow$	1	+		
ASE-59A	ASE_49A_6D2	Dec 11 2006		300	WATER	0 4	1	       	1	+	+	1	1	I	
	ASE-61A-6D2	Dec 11 2006	2501	MB	WATER	T	*	-	+	#	$\ddagger$	-	$\frac{1}{2}$		
	ASE-60A-6D2	Dec 11 2006		GW.	WATER	Ç	×	+	F	F	$\vdash$			4	
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Relinquished by:	Rondall	Company:	Nasi	ナン	Morse.	12/11/21	Date/Time:	Received by:	l by:		$\bigcup$		4.4°	<u>S</u>	Company:
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5090 Caterpillar Road Redding, CA 96003 Phone: (530) 244-5262 Fax #: (530) 244-4109

#### COOLER RECEIPT FORM

Projec	ct/Client: HONEYWELL	Batch No.:
1.	Cooler(s)/Sample(s) received on: 12-12-06	Shipped via: UPS
	Shipping Bill # (s):	# of Coolers/Packages 4
2.	Radiological Screening by: J JOHNSON	Acceptable Rejected
3.	Custody seals on outside of cooler:  If yes, where? Front Rear Lt Side Rt Side	YES (NO) N/A
	Seals intact:	YES (NO)
	COOLER/SAMPLE PROCESS	ING
4.	Sample Processing/Tagging by: JOEL & JOHNSON	
5.	Cooler(s)/Sample(s) Temp's: 1°c 1°c 1°c  (or) Temp. Blank (if included):	<u>1°c</u>
6.		bble Bags Zip Locks Webbing
	Other:	
7.	Custody papers properly filled out (ink, signed, dated, released, etc.)?	VES NO
8.	Containers arrived in good condition (not broken, leaking, etc.)?	(YES) NO
9.	Samples received with adequate holding time remaining to conduct analyst	is? YES NO
10.	Container labels complete (i.e. analysis, preservation, date/time, etc.)?	YES NO
11.	Container labels and tags agree with custody papers?	YES NO
12.	Correct types of containers used for the tests indicated?	(ES) NO
	a.) Adequate sample received? If not, note on Exception Report	t. Œ8 NO
13.	Containers supplied by:	(AS) Other
14.	Preserved containers received with the appropriate preservative?  pH: Vox's C PEL DOCS (or) See pH log.	YES NO N/A
15.	VOA vials free of air bubbles?	ES NO N/A
16.	Trip Blank preparation date: 12/61/66	CAS Other N/A
17.	Volatile Soil samples: Encores or Plugs in Vials	<u> </u>
	Freezer or GC/MS Date	e:Time:N/A

See Exception Report for discrepancies.

Rev. 8/18/2004/ds

# TPH DIESEL / MOTOR OIL RANGE ORGANICS

Client: Project: Honeywell International, Incorporated Sky Harbor/2959482

Service Request:

D0602039

Cover Page - Organic Analysis Data Package TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name	Lab Code	Date Collected	Date Received
PL-201A-6D2	D0602039-002	12/11/2006	12/12/2006
ASE-58A-6D2	D0602039-003	12/11/2006	12/12/2006
ASE-46A-6D2	D0602039-004	12/11/2006	12/12/2006
PL-504-6D2	D0602039-005	12/11/2006	12/12/2006
PL-2101-6D2	D0602039-006	12/11/2006	12/12/2006
ASE-54A-6D2	D0602039-007	12/11/2006	12/12/2006
PL-2102-6D2	D0602039-008	12/11/2006	12/12/2006
ASE-59A-6D2	D0602039-009	12/11/2006	12/12/2006
ASE-61A-6D2	D0602039-010	12/11/2006	12/12/2006
ASE-60A-6D2	D0602039-011	12/11/2006	12/12/2006
ASE-60A-6D2MS	DWG0601086-1	12/11/2006	12/12/2006
ASE-60A-6D2DMS	DWG0601086-2	12/11/2006	12/12/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:	Name:	Jamie	Beckett
Date:	Title:	Chemis.	+

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602039

**Date Collected:** 12/11/2006

**Date Received:** 12/12/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

PL-201A-6D2

Lab Code:

D0602039-002

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

				Dilution	Date	Date	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Arizona Qualifier
C10 - C22 DRO (TPH-Diesel)	<b>24</b> J	480	20	1	12/13/06	12/22/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/22/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier
Octacosane	87	26-152	12/22/06	,4
Tricontane	84	40-140	12/22/06	

Comments:

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1 of

SuperSet Reference: RR13344 15

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602039

**Date Collected:** 12/11/2006

**Date Received:** 12/12/2006

### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-58A-6D2

Lab Code:

D0602039-003

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

				Dilution	Date	Date		
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Arizona Qualifier	_
C10 - C22 DRO (TPH-Diesel)	46 J	480	20	1	12/13/06	12/22/06	E4	
C22 - C32 HRO (TPH-Motor Oil)	38 J	480	30	1	12/13/06	12/22/06	E4	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier	
Octacosane Tricontane	92 90	26-152 40-140	12/22/06 12/22/06		

Comments:

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Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602039

**Date Collected:** 12/11/2006

Date Conected: 1

**Date Received:** 12/12/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-46A-6D2

Lab Code:

D0602039-004

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

Dilution Date Date

				Dilution	Date	Date	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Arizona Qualifier
C10 - C22 DRO (TPH-Diesel)	110 J	480	20	1	12/13/06	12/22/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/22/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier	
Octacosane	80	26-152	12/22/06		
Tricontane	80	40-140	12/22/06		

Comments:

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602039

**Date Collected:** 12/11/2006

**Date Received:** 12/12/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

PL-504-6D2

Lab Code:

D0602039-005

Units: ug/L

Basis: NA

**Extraction Method:** 

Level: Low

EPA 3510C

8015B

Analysis Method:

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
C10 - C22 DRO (TPH-Diesel)	110 J	480	20	1	12/13/06	12/22/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/22/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier	
Octacosane	88	26-152	12/22/06		
Tricontane	86	40-140	12/22/06		

Comments:

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Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602039

**Date Collected:** 12/11/2006

**Date Received:** 12/12/2006

### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

PL-2101-6D2

Lab Code:

D0602039-006

Units: ug/L Basis: NA

**Extraction Method:** 

**Analysis Method:** 

EPA 3510C 8015B

Level: Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
C10 - C22 DRO (TPH-Diesel)	<b>23</b> J	480	20	1	12/13/06	12/22/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/22/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier	
Octacosane	90	26-152	12/22/06		
Tricontane	88	40-140	12/22/06		

Comments:

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602039

Date

Date Collected: 12/11/2006

**Date Received:** 12/12/2006

#### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-54A-6D2

Lab Code:

D0602039-007

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

Analyte Name	Result	Q	
C10 - C22 DRO (TPH-Diesel)	ND	U	

Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed Arizona Qualifier
C10 - C22 DRO (TPH-Diesel)	ND U	480	20	1	12/13/06	12/22/06
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/22/06

Dilution

Date

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier	
Octacosane	88	26-152	12/22/06		
Tricontane	86	40-140	12/22/06		

Comments:

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Form 1A - Organic

1 of

1

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602039

**Date Collected:** 12/11/2006

**Date Received:** 12/12/2006

#### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

PL-2102-6D2

Lab Code:

D0602039-008

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
C10 - C22 DRO (TPH-Diesel)	ND U	480	20	1	12/13/06	12/22/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/22/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier	
Octacosane	85	26-152	12/22/06		
Tricontane	84	40-140	12/22/06		

**Comments:** 

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SuperSet Reference:

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602039

**Date Collected:** 12/11/2006

**Date Received:** 12/12/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-59A-6D2

Lab Code:

D0602039-009

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
C10 - C22 DRO (TPH-Diesel)	ND U	480	20	1	12/13/06	12/22/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/22/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier	
Octacosane	91	26-152	12/22/06		
Tricontane	89	40-140	12/22/06		

Comments:

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22

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602039

Date Collected: 12/11/2006

**Date Received:** 12/12/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-61A-6D2

Lab Code:

D0602039-010

**Extraction Method:** 

EPA 3510C

**Analysis Method:** 

8015B

Units: ug/L

Basis: NA

Level: Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
C10 - C22 DRO (TPH-Diesel)	ND U	480	20	1	12/13/06	12/22/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/13/06	12/22/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier	
Octacosane	87	26-152	12/22/06		
Tricontane	86	40-140	12/22/06		

Comments:

Merged

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Ground water

**Date Collected:** 12/11/2006

Service Request: D0602039

**Date Received:** 12/12/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-60A-6D2

Lab Code:

D0602039-011

Units: ug/L Basis: NA

Extraction Method:

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
C10 - C22 DRO (TPH-Diesel) C22 - C32 HRO (TPH-Motor Oil)	ND U ND U	480 480	20 30	1	12/13/06 12/13/06	12/22/06 12/22/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier		
Octacosane	80	26-152	. 12/22/06			
Tricontane	79	40-140	12/22/06			

Comments:

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Form 1A - Organic 

1 of

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602039

Date Collected: NA

Date Received: NA

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

Method Blank

Lab Code:

DWG0601086-4

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Arizona Qualifier
C10 - C22 DRO (TPH-Diesel)	ND U	500	20	1	12/13/06	12/22/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	500	30	1	12/13/06	12/22/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Arizona Qualifier	
Octacosane	. 81	26-152	12/22/06		
Tricontane	80	40-140	12/22/06		

Comments:

Merged

QA/QC Report

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602039

**Surrogate Recovery Summary** 

TPH-Diesel / Motor Oil Range Organics by SW8015B

**Extraction Method:** 

EPA 3510C

**Analysis Method:** 

8015B

Units: PERCENT

Level: Low

Sample Name	Lab Code	Sur1	Sur2
PL-201A-6D2	D0602039-002	87	84
ASE-58A-6D2	D0602039-003	92	90
ASE-46A-6D2	D0602039-004	80	80.
PL-504-6D2	D0602039-005	88	86
PL-2101-6D2	D0602039-006	90	88
ASE-54A-6D2	D0602039-007	88	86
PL-2102-6D2	D0602039-008	85	84
ASE-59A-6D2	D0602039-009	91	89
ASE-61A-6D2	D0602039-010	87	86
ASE-60A-6D2	D0602039-011	80	79
Method Blank	DWG0601086-4	81	80
ASE-60A-6D2MS	DWG0601086-1	104	101
ASE-60A-6D2DMS	DWG0601086-2	96	93
Lab Control Sample	DWG0601086-3	101	98

#### Surrogate Recovery Control Limits (%)

Sur1 = Octacosane Sur2 = Tricontane

26-152

40-140

Results flagged with an asterisk (\*) indicate values outside control criteria. Results flagged with a pound (#) indicate the control criteria is not applicable.

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QA/QC Report

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602039

**Date Extracted:** 12/13/2006

**Date Analyzed:** 12/22/2006 -

12/23/2006

Matrix Spike/Duplicate Matrix Spike Summary TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-60A-6D2

Lab Code:

D0602039-011

Units: ug/L

Basis: NA

Level: Low

**Extraction Method: Analysis Method:** 

EPA 3510C 8015B

Extraction Lot: DWG0601086

ASE-60A-6D2MS

ASE-60A-6D2DMS

	Sample	DWG0601086-1  Matrix Spike			DWG0601086-2 Duplicate Matrix Spike			%Rec		RPD
Analyte Name	Result	Result	Expected	%Rec	Result	Expected	%Rec	Limits	RPD	Limit
C10 - C22 DRO (TPH-Diesel)	ND	1900	2380	80	1750	2380	73	61-143	8	30

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Page 1 of

SuperSet Reference: RR13344 27

QA/QC Report

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602039

**Date Extracted:** 12/13/2006

**Date Analyzed:** 12/22/2006

Lab Control Spike Summary TPH-Diesel / Motor Oil Range Organics by SW8015B

**Extraction Method:** 

EPA 3510C

**Analysis Method:** 

8015B

Units: ug/L

Basis: NA

Level: Low

Extraction Lot: DWG0601086

Lab Control Sample DWG0601086-3

Lab Control Spike

%Rec Limits %Rec **Analyte Name** Result **Expected** C10 - C22 DRO (TPH-Diesel) 1940 2500 78 61-143 C22 - C32 HRO (TPH-Motor Oil) 2500 78 60-120 1940

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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### GC/MS VOLATILE ORGANICS

#### ORGANIC ANALYSES DATA PACKAGE

Lab Name: Columbia Analytical Services/Redding	
Base/Command: ARIZONA DELIVERABLES	
Project: Sky Harbor	
Field Sample ID	Lab Sample ID
TB121106	D0602039-001
PL-201A-6D2	D0602039-002
ASE-58A-6D2	D0602039-003
ASE-46A-6D2	D0602039-004
PL-504-6D2	D0602039-005
PL-2101-6D2	D0602039-006
ASE-54A-6D2	D0602039-007
PL-2102-6D2	D0602039-008
ASE-59A-6D2	D0602039-009
ASE-61A-6D2	D0602039-010
ASE-60A-6D2	D0602039-011
ASE-60A-6D2MS	D0602039-011MS
ASE-60A-6D2MSD	D0602039-011MSD
Commants	
Comments:	
· · · · · · · · · · · · · · · · · · ·	
I certify this data package is in compliance with the terms and completeness, for other than the conditions detailed above. R and in the computer-readable data submitted on diskette has b Manager's designee, as verified by the following signature.	elease of the data contained in this hardcopy data package
Signature: Name	: Technical MANAger
Date: 12/18/06 Title:	BriAN MOORE

RDD-061215:DK:BS-1454PST-SR:D0602039-D0602039-V

Analytical Method: SW8260			AAB #: D0602039
Lab Name: Columbia Analytical Ser	rvices/Redding		
Field Sample ID: TB121106	Lab Sample ID:	D0602039-001	Matrix: Water
% Solids:		Initial Calib	oration ID: 12/05/06MSM
Date Received: 12/12/06	Date Extracted:	Date Ana	lyzed: 12/13/06
Concentration Units (ug/L or ug/Kg dr	y weight): UG/L	Sample Volume:	_5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		· · · · · · · · · · · · · · · · · · ·
Acetone	1.0	20	2.4	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	ND	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1	-	
Toluene	0.14	2.0	ND	1		***************************************
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Internal Standards are reported in Appendix O-

Surrogate Recoveries are reported in Appendix O-A

Analytical Method: SW8260	-	AAB #: <u>D0602039</u>	
Lab Name: Columbia Analytical Serv	vices/Redding		
Field Sample ID: TB121106	Lab Sample ID: D	D0602039-001 Matrix: Water	
% Solids:		Initial Calibration ID: 12/05/06MSM	_
Date Received: 12/12/06	Date Extracted:	Date Analyzed: 12/13/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	ND	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		-
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1.		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260						AAB #: <u>D</u>	0602039	
Lab Name:	Columbia Analyti	ical Services/Redding	3						
Field Sample	ID: <u>TB121106</u>		Lab Sa	ample ID: D	0602	039-001	Matrix: _V	/ater	*********
% Solids:	·					Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: 12/12/06	Date Extrac	cted: _			Date Anal	yzed: <u>12/1</u>	3/06	****
Concentration	n Units (ug/L or ug	g/Kg dry weight):	UG/L		Sam	nple Volume:	5.000 MI	<u>.                                    </u>	
	Analyte	M	DL	RL	C	oncentration	Dilution	Confirm	Qualifier
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									· · · · · · · · · · · · · · · · · · ·
	Sur	rogate	I	Recovery		Control Limits	Qua	lifier	* 62
	4-Bromofluorob			102		82-124			
	Dibromofluoron		-	100		84-127			
	Toluene-d8 - SS			102	+-	80-117			
			<u> </u>		<u> </u>				
		Intern	al Stan	dard		Qualifier			
		Fluorobenzene					_		
		Chlorobenzene-d5 1,4-Dichlorobenzen	ne-d4				-		
		1,1 Diemorocenzei	u-r						
						Surrogate Recove	ories are renov	ted in Annand	ir O-4
Comments:						Internal Stand			

Analytical Method: SW8260	AAB #:D0602039	
Lab Name: Columbia Analytical Serv	ices/Redding	
Field Sample ID: PL-201A-6D2	Lab Sample ID: D0602039-002 Matrix: Water	
% Solids:	Initial Calibration ID: 12/05/06MSM	_
Date Received: 12/12/06	Date Extracted: Date Analyzed:	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	2.5	1		
Bromomethane	0.27	1.0	ND	1	-	
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.20	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	1.7	1		
1,1-Dichloroethane	0.12	2.0	12	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.52	1		E4
2-Butanone	0.90	10	ND	11		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.78	1		· E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	0.13	1		E4
1,2-Dichloroethane	0.18	1.0	ND	1		1
Trichloroethene	0.10	1.0	1.1	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.18	11		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	11		

Comments:		Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Analytical Method: SW8260	<del>-</del>		AAB #: D0602039
Lab Name: Columbia Analytical Services	/Redding		
Field Sample ID: PL-201A-6D2	Lab Sample ID:	D0602039-002	Matrix: Water
% Solids:		Initial Calib	ration ID: <u>12/05/06MSM</u>
Date Received: 12/12/06 Date	te Extracted:	Date Anal	yzed: 12/13/06
Concentration Units (ug/L or ug/Kg dry weight	ght): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.41	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.42	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	0.37	1		E4
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	- 1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	0.39	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	0.29	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	0.16	1		E4
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	0.35	- 1		E4
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:		Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Analytical Mo	ethod: SW8260		_					AAB #:D	0602039	
Lab Name:	Columbia Analyt	ical Services/	Redding	3						
_	ID: PL-201A-6				ample ID:	D0602	039-002	Matrix: V	Vater	
% Solids:	4-94-						Initial Calib			SM
Date Receive	d: <u>12/12/06</u>	Dat	e Extrac	ted:			Date Anal	yzed: 12/1	3/06	
	units (ug/L or ug									
	Analyte		MI	DL	RL	C	oncentration	Dilution	Confirm	Qualifier
								-		
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	Sur	rrogate		F	Recovery	- 0	Control Limits	Qua	lifier	
	4-Bromofluorob			-	101		82-124			
	Dibromofluoron				103		84-127			
	Toluene-d8 - SS				101		80-117			
			Interna	al Stan	dard		Qualifier	1		
		Fluorobenz	ene							
		Chlorobenz						_		
		1,4-Dichlor	robenzer	ne-d4	THE WASHINGTON PROPERTY.			_		
							Surrogate Recove			
Comments:							Internal Stand	ards are repor	ted in Append	ix O-C
					n-read-material resources and control of the second					

Analytical Method: SW8260		AAB #:_	D0602039
Lab Name: Columbia Analytical Serv	ices/Redding		
Field Sample ID: ASE-58A-6D2	Lab Sample ID: I	00602039-003 Matrix:	Water
% Solids:		Initial Calibration ID:	12/05/06MSM
Date Received: 12/12/06	Date Extracted:	Date Analyzed: 12	/13/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: 5.000 M	ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	4.6	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	5.2	1	·	
1,1-Dichloroethane	0.12	2.0	16	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	. 1		
cis-1,2-Dichloroethene	0.17	2.0	0.63	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.28	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	2.1	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.68	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		·
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C
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Analytical Method: SW8260		AAB #: <u>D0602039</u>
Lab Name: Columbia Analytical Serv	rices/Redding	
Field Sample ID: ASE-58A-6D2	Lab Sample ID: D0602039-003	Matrix: Water
% Solids:	Initial Ca	alibration ID: 12/05/06MSM
Date Received: 12/12/06	Date Extracted: Date A	nalyzed: 12/13/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume	e: <u>5.000 ML</u>

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.27	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.28	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	0.24	1		E4
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		. '
Bromoform	0.18	5.0	ND	. 1		
Isopropylbenzene	0.17	2.0	1.2	1		E4
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	0.32	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.24	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	0.96	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	, ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Me	ethod: SW8260							AAB #: <u>D</u>	0602039			
Lab Name: _	Columbia Analyt	ical Services/I	Redding	<u>;                                    </u>								
Field Sample	ID: ASE-58A-6	5D2		Lab Sa	ample ID:	D0602	039-003	Matrix: V	Vater			
% Solids:					-		Initial Calib			SM		
Date Receive	d: <u>12/12/06</u>	Date	e Extrac	ted:			Date Anal	yzed: 12/1	3/06	-		
	n Units (ug/L or ug						mple Volume:					
	Analyte		MI	DL	RL	C	oncentration	Dilution	Confirm	Qualifier		
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		rogate		H	Recovery		Control Limits	s Qua	lifier			
	***************************************			mofluorobenzene - SS			101		82-124			
	Dibromofluoror Toluene-d8 - SS				99 102		84-127 80-117					
	Toldene do Be				102		00-117					
				1.0.				7				
		Fluorobenze	Interna	ii Stan	idard		Qualifier	-				
	Chlorobenzene-d5							-				
		1,4-Dichlor		e-d4			-					
			- ; - · · · · · · · · · · · · · · · · ·				**************************************	<del></del>				
							Surrogate Recove	eries are repor	ted in Append	'ix O-A		
Comments:							Internal Stand					
										<del></del> ,		
	······											

Analytical Method: SW8260			AAB #: <u>D0602039</u>	
Lab Name: Columbia Analytical Serv	ices/Redding			
Field Sample ID: ASE-46A-6D2	Lab Sample ID:	D0602039-004	Matrix: Water	
% Solids:		Initial Calib	pration ID: 12/05/06MSM	_
Date Received: 12/12/06	Date Extracted:	Date Ana	lyzed: 12/13/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	14	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	8.0	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.27	1		E4
Acetone	1.0	20	1.1	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1	·	
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	10	1		
1,1-Dichloroethane	0.12	2.0	78	1		
Vinyl acetate	0.84	25	ND	1.		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	2.7	1		
2-Butanone	0.90	10	ND	-1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	4.6	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	2.4	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.80	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

	Surrogate Recoveries are reported in Appendix (				
Comments:	Internal Standards are reported in Appendix O-C				

Analytical Method: SW8260	MANAGEMENT AND AND AND AND AND AND AND AND AND AND		AAB #: D0602039	
Lab Name: Columbia Analytical Serv	vices/Redding			
Field Sample ID: ASE-46A-6D2	Lab Sample ID:	D0602039-004	Matrix: Water	
% Solids:		Initial Calib	ration ID: 12/05/06MSM	
Date Received: 12/12/06	Date Extracted:	Date Anal	yzed: 12/13/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.77	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	0.17	1		E4
1,2-Dibromoethane	0.15	2.0	· ND	1		
Chlorobenzene	0.15	1.0	2.0	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	0.22	1		E4
Xylene (total)	0.14	10	0.41	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	1.7	1		E4
Isopropylbenzene	0.17	2.0	3.8	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	2.0	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	0.20	1		E4
4-Chlorotoluene	0.16	5.0	ND	1 .		
tert-Butylbenzene	0.18	5.0	0.32	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	0.14	1		E4
sec-Butylbenzene	0.17	5.0	1.1	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.11	1		E4
1,4-Dichlorobenzene	0.11	1.0	0.44	1		E4
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	0.20	1		E4
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	1.3	1		E4
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260					AAB #:D	0602039	
Lab Name:	Columbia Analyti	cal Services/Redding	<u> </u>					
Field Sample	ID: ASE-46A-6	DD2	Lab Sample II	D: D060	2039-004	Matrix: _V	Vater	
% Solids:					Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: 12/12/06	Date Extrac	eted:		Date Anal	yzed: 12/1	3/06	
Concentration	n Units (ug/L or ug	/Kg dry weight): _	UG/L	San	mple Volume:	5.000 M	<u>L</u>	
	Analyte	M	DL R	L (	Concentration	Dilution	Confirm	Qualifi
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	A TAMAYA MANAKA						·	
		·						
	Sur	rogate	Recovery	y	Control Limits	s Qua	lifier	
	4-Bromofluorob	enzene - SS	102		82-124		· · · · · · · · · · · · · · · · · · ·	
	Dibromofluoron	·	100					
	Toluene-d8 - SS	DELINIUS SERVICE SERVI	102		80-117			
					····		<u></u>	
		Interna	al Standard		Qualifier			
		Fluorobenzene						
		Chlorobenzene-d5				_		
		1,4-Dichlorobenzer	ne-d4					
					Surrogate Recove			
Comments:					Internal Stand	ards are repor	ted in Append	ix O-C

Analytical Method: SW8260	AAB #: <u>D0602039</u>
Lab Name: Columbia Analytical Serv	ices/Redding
Field Sample ID: PL-504-6D2	Lab Sample ID: D0602039-005 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/12/06	Date Extracted: Date Analyzed:
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	15	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	8.7	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.29	1		E4
Acetone	1.0	20	1.2	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	11		
Tert-butylmethylether	0.17	1.0	10	1		
1,1-Dichloroethane	0.12	2.0	85	1		
Vinyl acetate	0.84	25	ND	11		
2,2-Dichloropropane	0.33	2.0	ND	11		
cis-1,2-Dichloroethene	0.17	2.0	2.6	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	11		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	4.9	11		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	2.2	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	11		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.84	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-A
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Analytical Method: SW8260		AAB #: <u>D0602</u> 039
Lab Name: Columbia Analytical Serv	vices/Redding	
Field Sample ID: PL-504-6D2	Lab Sample ID: D0602039-0	Matrix: Water
% Solids:	Init	tial Calibration ID: 12/05/06MSM
Date Received: 12/12/06	Date Extracted: D	Date Analyzed: 12/13/06
Concentration Units (ug/L or ug/Kg dry	weight): <u>UG/L</u> Sample V	Volume:5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.85	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	0.17	1		E4
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	2.2	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	0.23	1		E4
Xylene (total)	0.14	10	0.44	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	1.7	1		E4
Isopropylbenzene	0.17	2.0	4.2	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1	-	
n-Propylbenzene	0.13	2.0	2.2	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.31	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	0.17	1		E4
sec-Butylbenzene	0.17	5.0	1.3	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.13	1		E4
1,4-Dichlorobenzene	0.11	1.0	0.46	1		E4
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	0.20	1		E4
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1	,	
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	1.5	1		E4
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Internal Standards are reported in Appendix O-C

								AAD #	0.602020		
-	ethod: SW8260		-					AAB #:D	0602039	alastic de la companya de la company	
Lab Name:	Columbia Analyti	ical Services/	Redding	2							
Field Sample	ample ID: PL-504-6D2 Lab San					ample ID: D0602039-005 Matrix: Water					
% Solids:					Initial Calibration ID: 12/05/06MSM						
Date Receive	d: <u>12/12/06</u>	Dat	e Extrac	ted:			Date Anal	yzed: 12/1	3/06		
Concentration	n Units (ug/L or ug	g/Kg dry wei	ght): _U	UG/L		San	nple Volume:	5.000 M	L		
	Analyte		MI	)L	RL	С	oncentration	Dilution	Confirm	Qualifier	
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		rrogate	ene - SS		Recovery		Control Limits 82-124		lifier		
	4-Bromofluorob Dibromofluoron	<del></del>			102	84-127					
	Toluene-d8 - SS				100		80-117				
Interna Fluorobenzene Chlorobenzene-d5			Interna	al Stan	ıdard		Qualifier				
	1,4-Dichlorobenzene-d										
Comment							Surrogate Recover Internal Stand				
Comments:							Timer nut blund	as are repor	.cu m rippenu		

Analytical Method: SW8260	AAB #:	_
Lab Name: Columbia Analytical Serv	ices/Redding	
Field Sample ID: PL-2101-6D2	Lab Sample ID: D0602039-006 Matrix: Water	
% Solids:	Initial Calibration ID: 12/05/06MSM	
Date Received: 12/12/06	Date Extracted: Date Analyzed: 12/13/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	12	. 1		
Bromomethane	0.27	1.0	ND	1	·	
Chloroethane	0.20	5.0	1.0	1		E4
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	0.95	1		E4
1,1-Dichloroethane	0.12	2.0	12	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.16	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	0.33	1		E4
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.51	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1	-	
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Internal Standards are reported in Appendix O-C

Analytical Method: SW8260		AAB #: <u>D0602039</u>
Lab Name: Columbia Analytical Servi	ces/Redding	
Field Sample ID: PL-2101-6D2	Lab Sample ID: D	00602039-006 Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/12/06	Date Extracted:	Date Analyzed: 12/13/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.27	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.21	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	0.19	1		E4
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		-
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	0.26	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1 .		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	0.36	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1,		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		·

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Lab Name: Columbia Analytical Services/Redding Field Sample ID: PL-2101-6D2	Analytical M	ethod: SW8260						AAB #:D	0602039	
Margate Recovery Control Limits Qualifier    Surrogate Recovery Control Limits Qualifier   Fluorobenzene - SS   100   82-124   Dibromofluorobenzene - SS   101   80-117   Fluorobenzene - Chlorobenzene - GLiorobenzene - GLio	Lab Name:	Columbia Analyti	cal Services/Reddin	g						
Date Received: 12/12/06 Date Extracted: Date Analyzed: 12/13/06  Concentration Units (ug/L or ug/Kg dry weight): UG/L Sample Volume: 5.000 ML  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier  Burrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 100 82-124  Dibromofluoromethane - SS 99 84-127  Toluene-d8 - SS 101 80-117  Internal Standard Qualifier  Fluorobenzene Chlorobenzene-d4  Internal Standard Qualifier  Fluorobenzene-d5  1,4-Dichlorobenzene-d4	Field Sample	ID: <u>PL-2101-6I</u>	D2	Lab Sa	mple ID:	D0602	039-006	Matrix: V	Vater	
Concentration Units (ug/L or ug/Kg dry weight): UG/L Sample Volume: 5.000 ML  Analyte MDL RL Concentration Dilution Confirm Qualifier							Initial Calib	ration ID: _	12/05/06M	SM
Concentration Units (ug/L or ug/Kg dry weight): UG/L Sample Volume: 5.000 ML  Analyte MDL RL Concentration Dilution Confirm Qualifier	Date Receive	d: 12/12/06	Date Extra	cted:			Date Anal	yzed: 12/1	3/06	
Surrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										-
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117    Internal Standard Qualifier   Fluorobenzene   Chlorobenzene-d5   1,4-Dichlorobenzene-d4		Analyte	М	DL	RL	C	oncentration	Dilution	Confirm	Qualifie
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117    Internal Standard Qualifier   Fluorobenzene   Chlorobenzene-d5   1,4-Dichlorobenzene-d4										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117    Internal Standard Qualifier   Fluorobenzene   Chlorobenzene-d5   1,4-Dichlorobenzene-d4										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117    Internal Standard Qualifier   Fluorobenzene   Chlorobenzene-d5   1,4-Dichlorobenzene-d4										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117    Internal Standard Qualifier   Fluorobenzene   Chlorobenzene-d5   1,4-Dichlorobenzene-d4										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117    Internal Standard Qualifier   Fluorobenzene   Chlorobenzene-d5   1,4-Dichlorobenzene-d4						_		·		
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117    Internal Standard Qualifier   Fluorobenzene   Chlorobenzene-d5   1,4-Dichlorobenzene-d4										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117    Internal Standard Qualifier   Fluorobenzene   Chlorobenzene-d5   1,4-Dichlorobenzene-d4										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117    Internal Standard Qualifier   Fluorobenzene   Chlorobenzene-d5   1,4-Dichlorobenzene-d4	: ************************************	<u> </u>				-				
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117    Internal Standard Qualifier   Fluorobenzene   Chlorobenzene-d5   1,4-Dichlorobenzene-d4										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117    Internal Standard Qualifier   Fluorobenzene   Chlorobenzene-d5   1,4-Dichlorobenzene-d4										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117    Internal Standard Qualifier   Fluorobenzene   Chlorobenzene-d5   1,4-Dichlorobenzene-d4										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117    Internal Standard Qualifier   Fluorobenzene   Chlorobenzene-d5   1,4-Dichlorobenzene-d4							· · · · · · · · · · · · · · · · · · ·			
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117    Internal Standard Qualifier   Fluorobenzene   Chlorobenzene-d5   1,4-Dichlorobenzene-d4										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117    Internal Standard Qualifier   Fluorobenzene   Chlorobenzene-d5   1,4-Dichlorobenzene-d4					-			***************************************		
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117    Internal Standard Qualifier   Fluorobenzene   Chlorobenzene-d5   1,4-Dichlorobenzene-d4		Sur	rogate	R	ecoverv		Control Limits	Oua	lifier	:
Dibromofluoromethane - SS 99 84-127 Toluene-d8 - SS 101 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A				<del>  •</del>				7 244		
Internal Standard Qualifier  Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A		Dibromofluoron	nethane - SS		99					
Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A		Toluene-d8 - SS			101		80-117			
Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A							<del>Out Charles to Land to the Communication</del>			
Chlorobenzene-d5  1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A			Intern	al Stan	dard		Qualifier			
1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A			Fluorobenzene							
Surrogate Recoveries are reported in Appendix O-A										
		·	1,4-Dichlorobenze	ne-d4						
Comments:	Comment									
	Comments:							a. c repor	турсти	

Analytical Method: SW8260		AAB #: <u>D0602039</u>	
Lab Name: Columbia Analytical Serv	rices/Redding		
Field Sample ID: ASE-54A-6D2	Lab Sample ID:	D0602039-007 Matrix: Water	
% Solids:		Initial Calibration ID: 12/05/06MSM	
Date Received: 12/12/06	Date Extracted:	Date Analyzed: 12/13/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	0.50	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.49	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	. ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.70	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	0.26	1		E4
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	***************************************	A.	AB #: D0602039
Lab Name: Columbia Analytical Serv	vices/Redding		
Field Sample ID: ASE-54A-6D2	Lab Sample ID:	D0602039-007 M	fatrix: Water
% Solids:		Initial Calibrat	tion ID: <u>12/05/06MSM</u>
Date Received: <u>12/12/06</u>	Date Extracted:	Date Analyz	red: 12/13/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: _	5.000 ML

Analyte	MDL	RL .	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1	,	
Tetrachloroethene	0.22	1.0	0.33	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		,
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.46	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	0.20	1		E4
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	0.29	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	11		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	0.21	11		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	0.15	1		E4
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:		Internal Standards are i	reported in Appendix O-A reported in Appendix O-C

Analytical M	ethod: SW8260	,						AAB #:D	0602039	
Lab Name:	Columbia Analyti	ical Services/	Redding							
Field Sample	ID: <u>ASE-54A-6</u>	5D2		Lab Sa	ample ID: D	0602	039-007	Matrix: _V	Vater	
% Solids:	MT 6 OF MEDICAL PROPERTY AND ADDRESS.						Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: <u>12/12/06</u>	Dat	e Extrac	ted: _			Date Anal	yzed: 12/1	3/06	
Concentration	units (ug/L or ug	g/Kg dry weig	ght): <u> </u>	JG/L		Sam	nple Volume:	5.000 M	<u> </u>	
	Analyte		MI	)L	RL	C	oncentration	Dilution	Confirm	Qualifier
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						+				
						-				
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					<u> </u>			·		
	Sur	rogate	-	I	Recovery	(	Control Limits	S Qua	lifier	
	4-Bromofluorob				99		82-124			
	Dibromofluoron	<del></del>		-	98	<del> </del>	84-127			
	Toluene-d8 - SS				101	╁	80-117			
	L									
			Interna	l Stan	dard		Qualifier			
		Fluorobenz	ene							
		Chlorobenz						4		
		1,4-Dichlor	obenzen	ie-d4						
Comments:							Surrogate Recove Internal Stand			
										,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

Analytical Method: SW8260	AAB #:	
Lab Name: Columbia Analytical Serv	ces/Redding	
Field Sample ID: PL-2102-6D2	Lab Sample 1D: D0602039-008 Matrix: Water	
% Solids:	Initial Calibration ID: 12/05/06MSM	_
Date Received: 12/12/06	Date Extracted: Date Analyzed: 12/13/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1	·	
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	ND	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1 .		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.37	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.61	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB #:D0602039
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: PL-2102-6D2 Lab Sample ID:	D0602039-008 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/12/06 Date Extracted:	Date Analyzed: 12/13/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.36	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	0.27	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	-1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		'
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	0.22	1.		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	0.18	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	0.12	1		E4
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	tical Method: SW8260						AAB #:_ D0602039			
Lab Name:	Columbia Analyti	cal Services/Reddin	ng							
Field Sample	ID: PL-2102-6I	02	Lab S	ample ID:	D060	2039-008	Matrix: _V	Vater		
% Solids:						Initial Calib	alibration ID: 12/05/06MSM			
Date Receive	d: <u>12/12/06</u>	Date Extra	acted: _		-	Date Anal	yzed: _12/1	3/06		
Concentration	n Units (ug/L or ug	/Kg dry weight):	UG/L		Sa	mple Volume:	5.000 M	<u>L</u>		
	Analyte	N	1DL	RL	(	Concentration	Dilution	Confirm	Qualifi	
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				2	+					
				<u> </u>	<u> </u>					
		rogate	]	Recovery	+	Control Limits	s Qua	lifier		
	4-Bromofluorob Dibromofluoron			100	+	82-124 84-127				
	Toluene-d8 - SS			100		80-117				
	·									
		Inter	nal Star	ıdard		Qualifier	7			
		Fluorobenzene			Quanter	_				
	Chlorobenzene-d5									
1,4-Dichlorobenzene-d4			1							
Ca						Surrogate Recove Internal Stand				
Comments:						inc.na sana	all are repor			
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Analytical Method: SW8260	AAB #: <u>D0602039</u>
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-59A-6D2 Lab Sample ID:	D0602039-009 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/12/06 Date Extracted:	Date Analyzed: 12/13/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	. 1		
Bromomethane	0.27	1.0	ND	1		-
Chloroethane	0.20	5.0	0.87	1		E4
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	1.7	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	- 1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	38	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		-
cis-1,2-Dichloroethene	0.17	2.0	0.54	1		E4
2-Butanone	0.90	. 10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.92	1	·	E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	12	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	0.28	1		E4
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260		A	AB #: <u>D0602039</u>
Lab Name: Columbia Analytical Serv	ices/Redding		
Field Sample ID: ASE-59A-6D2	Lab Sample ID:	D0602039-009 M	latrix: Water
% Solids:		Initial Calibrat	ion ID: <u>12/05/06MSM</u>
Date Received: 12/12/06	Date Extracted:	Date Analyz	ed: 12/13/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	1.2	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	- ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	0.16	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	-1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C

Analytical M	Analytical Method: SW8260					AAB #: D0602039		
Lab Name:	Columbia Analyti	ical Services/Red	dding					
Field Sample	ID: <u>ASE-59A-6</u>	5D2	Lab S	Sample ID: [	00602039-009	Matrix: _V	Vater	<u>.                                      </u>
% Solids:					Initial Calib	oration ID: _	12/05/06M	SM
Date Receive	ed: <u>12/12/06</u>	Date E	xtracted:	***************************************	Date Ana	lyzed: 12/1	3/06	
Concentration	n Units (ug/L or ug	g/Kg dry weight)	: <u>UG/L</u>		Sample Volume:	5.000 M	<u>L</u>	
	Analyte		MDL	RL	Concentration	Dilution	Confirm	Qualifi
								-
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		-						
						1		~*
		rogate		Recovery	Control Limit	s Qua	llifier	
	4-Bromofluorob Dibromofluoron			103	82-124 84-127			
	Toluene-d8 - SS			103	80-117			
		In	Internal Standard Q					
		Fluorobenzene						
		Chlorobenzene 1,4-Dichlorobe						
	İ				···········			
					Surrogate Recov			
Comments:					Internal Stand	dards are repor	ted in Append	ix O-C
-					***************************************			W-1-1

Analytical Method: SW8260		AAB #: <u>D0602039</u>	
Lab Name: Columbia Analytical Serv	ices/Redding		
Field Sample ID: ASE-61A-6D2	Lab Sample ID:	D0602039-010 Matrix: Water	
% Solids:		Initial Calibration ID: 12/05/06MSM	
Date Received: 12/12/06	Date Extracted:	Date Analyzed: 12/13/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1	-	
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	2.2	1		
Acetone	1.0	20	ND	1		11.11.11.11
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	0.88	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	. 1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	1.1	1 .		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	11		
Benzene	0.12	1.0	ND	11		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	2.9	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	0.21	1		E4
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.17	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in A Internal Standards are reported in A				

Analytical Method: SW8260	AAB #: <u>D0602039</u>	
Lab Name: Columbia Analytical Se	vices/Redding	
Field Sample ID: ASE-61A-6D2	Lab Sample ID: D060	2039-010 Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/12/06	Date Extracted:	Date Analyzed: 12/13/06
Concentration Units (ug/L or ug/K g d	v weight): UG/I Sa	mple Volume: 5 000 MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	2.2	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1	-	
Chlorobenzene	0.15	1.0	0.16	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1 .		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	0.18	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:		Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
	PH-3-11-11-11-11-11-11-11-11-11-11-11-11-1	

Analytical M	ethod: SW8260					AAB#:	D0602039	deret de de la la de de de de de de de de de de de de de
Lab Name:	Columbia Analyti	cal Services/Redding	<u> </u>					
Field Sample	ID: ASE-61A-6	5D2	Lab Sam	ple I <u>D</u> : D	00602039-010	Matrix:	Water	
% Solids:					Initial Ca	libration ID	): 12/05/06N	ISM
Date Receive	d: <u>12/12/06</u>	Date Extrac	cted:		Date Ar	nalyzed: 1	2/13/06	
Concentration	n Units (ug/L or ug	/Kg dry weight):	UG/L	•••	Sample Volume	: 5.000	ML	
	Analyte	MI	DL	RL	Concentratio	n Dilutio	on Confirm	Qualifi
								<u> </u>
		A A A A A A A A A A A A A A A A A A A						
	***************************************							
				***************************************				
								<u> </u>
	Sur	rogate	Re	covery	Control Lim	its C	ualifier	
	4-Bromofluorob	··············		101	82-124			
	Dibromofluoron		100		84-127			
	Toluene-d8 - SS			101	80-117			
					<u> </u>			
	1	Interna	al Standa	ırd	Qualifie	r		
		Fluorobenzene			·			
	·	Chlorobenzene-d5						
		1,4-Dichlorobenzer	ne-d4					
					Surrogate Rec	overies are re	ported in Appen	dix O-A
Comments:					Internal Sta	ndards are re	ported in Appen	dix O-C

Analytical Method: SW8260	AAB #:D0602039	
Lab Name: Columbia Analytical Services/Reddi	ing	
Field Sample ID: ASE-60A-6D2	Lab Sample ID: D0602039-011 Matrix: Water	
% Solids:	Initial Calibration ID: 12/05/06MSM	
Date Received: 12/12/06 Date Extra	racted: Date Analyzed: 12/13/06	
Concentration Units (ug/L or ug/Kg dry weight):	UG/L Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	1.9	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	0.75	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.32	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	1.1	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	32	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.15	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Analytical Method: SW8260	·		AAB #: <u>D0602039</u>	
Lab Name: Columbia Analytical S	services/Redding			
Field Sample ID: ASE-60A-6D2	Lab Sample ID:	D0602039-011	Matrix: Water	
% Solids:		Initial Ca	libration ID: 12/05/06MSM	[
Date Received: 12/12/06	Date Extracted:	Date A	nalyzed: 12/13/06	
Concentration Units (ug/L or ug/Va	dry weight): LIC/I	Sample Volum	5 000 MI	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1	,	
Tetrachloroethene	0.22	1.0	2.0	1		-
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	. 1		
Chlorobenzene	0.15	1.0	0.18	1		E4
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	. ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	0.15	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1	0.00	
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:		Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260						AAB #:D	0602039	
Lab Name:	Columbia Analyti	cal Services/Reddi	ing						
Field Sample	ID: ASE-60A-6	5D2	Lab S	ample ID: D	06020	039-011	Matrix: _W	/ater	
% Solids:						Initial Calib	ration ID: _	12/05/06 <b>M</b>	SM
Date Receive	d: 12/12/06	Date Exti	racted:	-		Date Anal	yzed: 12/1	3/06	
	n Units (ug/L or ug								
[	Analyte		MDL	RL	Co	oncentration	Dilution	Confirm	Qualifier
					-				
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									, /s
		rogate	1	Recovery	C	Control Limits	Qua	lifier	
	4-Bromofluorob			103	-	82-124			
	Dibromofluoron Toluene-d8 - SS			103	$\vdash$	84-127 80-117			
		<b>.</b>	10.				7		
		Fluorobenzene	nal Star	idard		Qualifier	-		
		Chlorobenzene-d	5				1		
		1,4-Dichlorobenz					1		
	•								
						Surrogate Recove	ries are repor	ted in Append	ix O-A
Comments:						Internal Stando	_		

### ORGANIC ANALYSES DATA SHEET 6 BLANKS

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	······································
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1213W01
Lab Sample ID: M1213W01	
Initial Calibration ID: 12/05/06MSM	

Analyte	MDL	Method Blank	RL	Q
Dichlorodifluoromethane	0.36	ND	5.0	
Chloromethane	0.23	ND	5.0	
Vinyl chloride	0.22	ND	1.0	
Bromomethane	0.27	ND	1.0	
Chloroethane	0.20	ND	5.0	
Trichlorofluoromethane	0.14	ND	5.0	
1,1-Dichloroethene	0.19	ND	2.0	
Acetone	1.0	ND	20	
Carbon disulfide	0.11	ND	5.0	
Methylene chloride	0.15	ND	5.0	
Iodomethane	0.20	ND	10	
trans-1,2-Dichloroethene	0.16	ND	2.0	
Tert-butylmethylether	0.17	ND	1.0	
1,1-Dichloroethane	0.12	ND	2.0	
Vinyl acetate	0.84	ND	25	
2,2-Dichloropropane	0.33	ND	2.0	
cis-1,2-Dichloroethene	0.17	ND	2.0	
2-Butanone	0.90	ND	10	
Bromochloromethane	0.25	ND	5.0	
Chloroform	0.14	ND	2.0	
1,1,1-Trichloroethane	0.14	ND	2.0	·
1,1-Dichloropropene	0.18	ND	2.0	
Carbon tetrachloride	0.18	ND	2.0	
Benzene	0.12	ND	1.0	
1,2-Dichloroethane	0.18	ND	1.0	
Trichloroethene	0.10	ND	1.0	
1,2-Dichloropropane	0.17	ND	2.0	
Dibromomethane	0.18	ND	2.0	
Bromodichloromethane	0.17	ND	1.0	
cis-1,3-Dichloropropene	0.13	ND	2.0	
4-methyl-2-pentanone	0.85	ND	10	
Toluene	0.14	ND	2.0	

Comments:		

trans-1,3-Dichloropropene

0.19

ND

#### ORGANIC ANALYSES DATA SHEET 6 BLANKS

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1213W01
Lab Sample ID: M1213W01	
Initial Calibration ID: 12/05/06MSM	

Analyte	MDL	Method Blank	RL	Q
1,1,2-Trichloroethane	0.22	ND	1.0	
Tetrachloroethene	0.22	'ND	1.0	
1,3-Dichloropropane	0.11	ND	2.0	
2-Hexanone	0.58	ND	10	
Dibromochloromethane	0.15	ND	2.0	
1,2-Dibromoethane	0.15	ND	2.0	
Chlorobenzene	0.15	ND	1.0	
1,1,1,2-Tetrachloroethane	0.23	ND	5.0	
Ethylbenzene	0.15	ND	2.0	
Xylene (total)	0.14	ND	10	
Styrene	0.16	ND	2.0	
Bromoform	0.18	ND	5.0	
Isopropylbenzene	0.17	ND	2.0	
1,1,2,2-Tetrachloroethane	0.17	ND	1.0	
Bromobenzene	0.17	ND	5.0	
1,2,3-Trichloropropane	0.20	ND	10	
n-Propylbenzene	0.13	ND	2.0	-
2-Chlorotoluene	0.16	ND	5.0	
1,3,5-Trimethylbenzene	0.15	ND	2.0	
4-Chlorotoluene	0.16	ND	5.0	
tert-Butylbenzene	0.18	ND	5.0	
1,2,4-Trimethylbenzene	0.13	ND	2.0	
sec-Butylbenzene	0.17	ND	5.0	
1,3-Dichlorobenzene	0.11	ND	1.0	
p-Isopropyltoluene	0.10	ND	2.0	
1,4-Dichlorobenzene	0.11	ND	1.0	
n-Butylbenzene	0.33	ND	5.0	
1,2-Dichlorobenzene	0.14	ND	1.0	
1,2-Dibromo-3-chloropropane	0.81	ND	5.0	
1,2,4-Trichlorobenzene	0.36	ND	5.0	
Hexachlorobutadiene	0.60	ND	1.0	
Naphthalene	0.29	ND	2.0	
1,2,3-Trichlorobenzene	0.37	ND	5.0	

Comments:		
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### ORGANIC ANALYSES DATA SHEET 6 BLANKS

Analytical Method: SW8260		AAB #: _	D0602039	·		
Lab Name: Columbia Analytical S	ervices/Reddir	ng				
Concentration Units (ug/L or mg/kg)	: UG/L	Met	hod Blank ID: <u>M1</u>	213W01		
Lab Sample ID: M1213W01						
Initial Calibration ID: 12/05/06MSN	<u> </u>					
Analyte		MDL	Method Blank	RI		Q
			· ·			<del></del>
			-			
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
Surrogate		Recovery	Control Lim	its (	Qualifier	]
4-Bromofluorobenzene	- SS	102	82-124			1
Dibromofluoromethane	- SS	101	84-127			
Toluene-d8 - SS		101	80-117			
	<b>-</b>					J
Fluor	Interna obenzene	l Standard	Qualifie	r		
	obenzene-d5					
	ichlorobenzen	ie-d4				


Comments:

Analytical Method: SW8260	AAB #:	
Lab Name: Columbia Analytical	Services/Redding	
LCS ID: M1213W01LCS	Concentration Units (ug/L or mg/kg): UG/L	_
Date Extracted:	Date Analyzed: 12/13/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	12.2	122	27-158	
Chloromethane	10.0	10.8	108	51-137	ı
Vinyl chloride	10.0	10.7	107	57-137	
Bromomethane	10.0	11.3	113	44-156	
Chloroethane	10.0	11.0	110	60-140	
Trichlorofluoromethane	10.0	12.5	125	54-146	
1,1-Dichloroethene	10.0	11.0	110	70-130	
Acetone	50.0	45.6	91	55-137	
Carbon disulfide	10.0	10.0	100	50-127	
Methylene chloride	10.0	9.9	99	73-121	
lodomethane	10.0	9.5	95	50-150	E4
trans-1,2-Dichloroethene	10.0	9.6	96	74-124	
Tert-butylmethylether	10.0	9.9	99	75-119	
1,1-Dichloroethane	10.0	9.8	98	78-121	
Vinyl acetate	10.0	11.2	112	52-129	<b>E</b> 4
2,2-Dichloropropane	10.0	10.0	100	61-137	
cis-1,2-Dichloroethene	10.0	10.3	103	80-118	
2-Butanone	50.0	48.8	98	76-122	
Bromochloromethane	10.0	9.8	98	82-118	
Chloroform	10.0	9.7	97	73-125	
1,1,1-Trichloroethane	10.0	9.6	96	76-124	
1,1-Dichloropropene	10.0	10.1	101	80-119	
Carbon tetrachloride	10.0	9.7	97	68-135	
Benzene	10.0	10.1	101	81-119	
1,2-Dichloroethane	10.0	9.6	96	75-122	
Trichloroethene	10.0	9.9	99	79-118	
1,2-Dichloropropane	10.0	9.7	97	82-115	
Dibromomethane	10.0	9.9	99	84-116	
Bromodichloromethane	10.0	10.0	100	81-122	·
cis-1,3-Dichloropropene	10.0	10.2	102	78-118	
4-methyl-2-pentanone	50.0	51.5	103	81-127	
Toluene	10.0	9.8	98	83-116	
trans-1,3-Dichloropropene	10.0	10.0	100	73-122	

Comments:	

Analytical Method: SW8260	AAB #: <u>D0602039</u>	
Lab Name: Columbia Analytical Serv	vices/Redding	
LCS ID: M1213W01LCS	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/13/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	10.0	100	83-120	
Tetrachloroethene	10.0	10.2	102	82-118	
1,3-Dichloropropane	10.0	10.0	100	82-119	
2-Hexanone	50.0	50.8	102	81-130	
Dibromochloromethane	10.0	10.1	101	79-124	
1,2-Dibromoethane	10.0	10.1	101	82-116	
Chlorobenzene	10.0	10.0	100	86-114	
1,1,1,2-Tetrachloroethane	10.0	10.0	100	79-122	
Ethylbenzene	10.0	10.2	102	86-116	
Xylene (total)	30.0	30.7	102	85-117	
Styrene	10.0	10.3	103	84-119	
Bromoform	10.0	9.5	95	71-133	
Isopropylbenzene	10.0	10.6	106	77-117	
1,1,2,2-Tetrachloroethane	10.0	9.8	98	80-117	
Bromobenzene	10.0	10.1	101	84-120	
1,2,3-Trichloropropane	10.0	10.1	101	81-122	
n-Propylbenzene	10.0	10.4	104	87-117	
2-Chlorotoluene	10.0	10.3	103	87-119	
1,3,5-Trimethylbenzene	10.0	10.3	103	83-120	
4-Chlorotoluene	10.0	10.1	101	86-118	
tert-Butylbenzene	10.0	8.8	88	82-122	
1,2,4-Trimethylbenzene	10.0	10.4	104	86-121	
sec-Butylbenzene	10.0	10.7	107	84-128	
1,3-Dichlorobenzene	10.0	10.0	100	85-119	
p-Isopropyltoluene	10.0	10.2	102	84-121	
1,4-Dichlorobenzene	10.0	10.0	100	84-118	
n-Butylbenzene	10.0	9.8	98	81-123	
1,2-Dichlorobenzene	10.0	10.0	100	85-117	
1,2-Dibromo-3-chloropropane	40.0	38.6	96	67-121	
1,2,4-Trichlorobenzene	10.0	9.8	98	69-128	
Hexachlorobutadiene	10.0	10.1	101	71-135	
Naphthalene	10.0	10.5	105	60-131	
1,2,3-Trichlorobenzene	10.0	9.8	98	69-130	

Comments:	

Lab Nam	e: Columbia An	alytical Services/Red	ding	_			
LCS ID:	M1213W01LCS	Conce	ntration Units (	ug/L or mg	g/kg): <u>UG/L</u>	<u></u> .	
Date Extr	acted:	Date An	alyzed: 12/13/	/06			
Initial Ca	libration ID: 12/0	05/06MSM					
	Analyt	e	Expected	Found	%R	Control Limits	Q
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	Su	rrogate	Recovery	y C	ontrol Limits	Qualifier	
	4-Bromofluorol		102		82-124		
	Dibromofluoror		102		84-127	ļ	
	Toluene-d8 - SS	5	101		80-117		
			1				
			al Standard		Qualifier		
	Fluorobenzene Chlorobenzene-d5 I,4-Dichlorobenzene-d4						
						•	
Comment	es:						

Analytical Method: SW8260	AAB #: <u>D0602039</u>
Lab Name: Columbia Analytical S	ervices/Redding
LCS ID: M1213W01LCSD	Concentration Units (ug/L or mg/kg): UG/L
Date Extracted:	Date Analyzed: 12/13/06

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	11.5	115	27-158	
Chloromethane	10.0	10.6	106	51-137	
Vinyl chloride	10.0	10.5	105	57-137	
Bromomethane	10.0	11.1	111	44-156	
Chloroethane	10.0	10.9	109	60-140	
Trichlorofluoromethane	10.0	11.4	114	54-146	
1,1-Dichloroethene	10.0	10.9	109	70-130	
Acetone	50.0	44.6	89	55-137	
Carbon disulfide	10.0	10.0	100	50-127	
Methylene chloride	10.0	9.8	98	73-121	
Iodomethane	10.0	9.4	94	50-150	E4
trans-1,2-Dichloroethene	10.0	9.5	95	74-124	
Tert-butylmethylether	10.0	9.7	97	75-119	
1,1-Dichloroethane	10.0	9.7	97	78-121	
Vinyl acetate	10.0	10.5	105	52-129	<b>E4</b>
2,2-Dichloropropane	10.0	10.0	100	61-137	
cis-1,2-Dichloroethene	10.0	10.0	100	80-118	
2-Butanone	50.0	47.0	94	76-122	
Bromochloromethane	10.0	9.8	98	82-118	
Chloroform	10.0	9.5	95	73-125	
1,1,1-Trichloroethane	10.0	9.6	96	76-124	
1,1-Dichloropropene	10.0	9.9	99	80-119	
Carbon tetrachloride	10.0	9.7	97	68-135	
Benzene	10.0	10.0	100	81-119	
1,2-Dichloroethane	10.0	9.6	96	75-122	
Trichloroethene	10.0	9.7	97	79-118	
1,2-Dichloropropane	10.0	9.4	94	82-115	
Dibromomethane	10.0	9.8	98	84-116	
Bromodichloromethane	10.0	9.9	99	81-122	
cis-1,3-Dichloropropene	10.0	10.1	101	78-118	
4-methyl-2-pentanone	50.0	48.9	98	81-127	
Toluene	10.0	9.7	97	83-116	
trans-1,3-Dichloropropene	10.0	9.8	98	73-122	

Comments:		

Analytical Method: SW8260	AAB #: <u>D0602039</u>	·
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1213W01LCSD	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/13/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	9.7	97	83-120	
Tetrachloroethene	10.0	10.0	100	82-118	
1,3-Dichloropropane	10.0	9.8	98	82-119	
2-Hexanone	50.0	47.7	95	81-130	
Dibromochloromethane	10.0	10.0	100	79-124	
1,2-Dibromoethane	10.0	9.9	99	82-116	
Chlorobenzene	10.0	10.0	100	86-114	
1,1,1,2-Tetrachloroethane	10.0	9.8	98	79-122	
Ethylbenzene	10.0	10.2	102	86-116	
Xylene (total)	30.0	30.3	101	85-117	
Styrene	10.0	10.2	102	84-119	
Bromoform	10.0	9.4	94	71-133	
Isopropylbenzene	10.0	10.5	105	77-117	
1,1,2,2-Tetrachloroethane	10.0	9.7	97	80-117	
Bromobenzene	10.0	9.9	99	84-120	
1,2,3-Trichloropropane	10.0	9.7	97	81-122	<b>E4</b>
n-Propylbenzene	10.0	10.1	101	87-117	
2-Chlorotoluene	10.0	10.0	100	87-119	
1,3,5-Trimethylbenzene	10.0	10.2	102	83-120	
4-Chlorotoluene	10.0	9.9	99	86-118	
tert-Butylbenzene	10.0	10.3	103	82-122	
1,2,4-Trimethylbenzene	10.0	10.2	102	86-121	
sec-Butylbenzene	10.0	10.6	106	84-128	
1,3-Dichlorobenzene	10.0	9.8	98	85-119	
p-Isopropyltoluene	10.0	10.1	101	84-121	
1,4-Dichlorobenzene	10.0	9.9	99	84-118	
n-Butylbenzene	10.0	9.8	98	81-123	
1,2-Dichlorobenzene	10.0	9.9	99	85-117	
1,2-Dibromo-3-chloropropane	40.0	36.7	92	67-121	
1,2,4-Trichlorobenzene	10.0	9.8	98	69-128	
Hexachlorobutadiene	10.0	10.2	102	71-135	•
Naphthalene	10.0	10.2	102	60-131	
1,2,3-Trichlorobenzene	10.0	9.8	98	69-130	

Comments:			
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AAB#: <u>D0602039</u>

Analytical Method: SW8260

Lab Name	e: Columbia Ana	alytical Services/Rede	ding								
LCS ID:	LCS ID: M1213W01LCSD Concentration Units (ug/L or mg/kg): UG/L										
Date Extra	acted:	Date Ana	alyzed: 12/13	/06							
	ibration ID: 12/0										
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-	Anatyte	2	Expected	roul	nu	70K	Control Limits	Q			
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		rogate	Recover	y	Co	ntrol Limits	Qualifier				
	4-Bromofluorob		101			82-124					
	Dibromofluoron Toluene-d8 - SS		100 101			84-127 80-117					
	Totale do Bo	44	101			00 117					
		Intorno	al Standard		T	Qualifier	1				
		Fluorobenzene	n Standard			Quanner	1				
		Chlorobenzene-d5									
		1,4-Dichlorobenzer	ie-d4				]				
Comment	s:										
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### ORGANIC ANALYSES DATA SHEET 7 LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE

Analytical Method: SW8260		AAB #:	)	
Lab Name: Columbia Analytical Services/R	edding			
Concentration Units (ug/L or mg/kg): <u>UG/L</u>		_	%Solids:	
Parent Field Sample ID: MI213W01	BS ID:	M1213W01LCS	BSD ID: M1213W01LCSD	

·	Parent		Spiked		Duplicat					
Analyte	Sample	Spike	Sample	%R	Spike	%R	%RPD	Control	Control	Q
	Result	Added	Result		Sample			Limits	Limits	
·					Result			%RPD	%R	
Dichlorodifluoromethane		10.0	12.2	122	11.5	115	6	20	27-158	
Chloromethane		10.0	10.8	108	10.6	106	2	20	51-137	-
Vinyl chloride		10.0	10.7	107	10.5	105	2	20	57-137	
Bromomethane		10.0	11.3	113	11.1	111	2	20	44-156	
Chloroethane		10.0	11.0	110	10.9	109	1	20	60-140	
Trichlorofluoromethane		10.0	12.5	125	11.4	114	9	20	54-146	
1,1-Dichloroethene		10.0	11.0	110	10.9	109	1	20	70-130	
Acetone		50.0	45.6	91	44.6	89	2	20	55-137	
Carbon disulfide		10.0	10.0	100	10.0	100	0	20	50-127	
Methylene chloride		10.0	9.9	99	9.8	98	1	20	73-121	
lodomethane		10.0	9.5	95	9.4	94	1	20	50-150	E4
trans-1,2-Dichloroethene		10.0	9.6	96	9.5	95	1	20	74-124	
Tert-butylmethylether		10.0	9.9	99	9.7	97	2	20	75-119	
1,1-Dichloroethane		10.0	9.8	98	9.7	97	1	20	78-121	
Vinyl acetate		10.0	11.2	112	10.5	105	6	20	52-129	E4
2,2-Dichloropropane		10.0	10.0	100	10.0	100	0	20	61-137	
cis-1,2-Dichloroethene		10.0	10.3	103	10.0	100	3	20	80-118	
2-Butanone		50.0	48.8	98	47.0	94	4	20	76-122	
Bromochloromethane		10.0	9.8	98	9.8	98	0	20	82-118	
Chloroform		10.0	9.7	97	9.5	95	2	20	73-125	
1,1,1-Trichloroethane		10.0	9.6	96	9.6	96	0	20	76-124	
1,1-Dichloropropene		10.0	10.1	101	9.9	99	2	20	80-119	
Carbon tetrachloride		10.0	9.7	97	9.7	97	0	20	68-135	
Benzene		10.0	10.1	101	10.0	100	1	20	81-119	The state of the s
1,2-Dichloroethane		10.0	9.6	96	9.6	96	0	20	75-122	
Trichloroethene		10.0	9.9	99	9.7	97	2	20	79-118	
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Comments:	

### ORGANIC ANALYSES DATA SHEET 7 LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE

Analytical Method: SW8260		AAB #: <u>D0602039</u>	)
Lab Name: Columbia Analytical Services/Reddi	ing	-	
Concentration Units (ug/L or mg/kg): UG/L		_	%Solids:
Parent Field Sample ID: M1213W01	BS ID:	M1213W01LCS	BSD ID: M1213W01LCSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
1,2-Dichloropropane		10.0	9.7	97	9.4	94	3	20	82-115	
Dibromomethane		10.0	9.9	99	9.8	98	1	20	84-116	
Bromodichloromethane		10.0	10.0	100	9.9	99	1	20	81-122	-
cis-1,3-Dichloropropene		10.0	10.2	102	10.1	101	1	20	78-118	
4-methyl-2-pentanone		50.0	51.5	103	48.9	98	5	20	81-127	
Toluene		10.0	9.8	98	9.7	97	1	20	83-116	
trans-1,3-Dichloropropene		10.0	10.0	100	9.8	98	2	20	73-122	
1,1,2-Trichloroethane		10.0	10.0	100	9.7	97	3	20	83-120	
Tetrachloroethene		10.0	10.2	102	10.0	100	2	20	82-118	
1,3-Dichloropropane		10.0	10.0	100	9.8	98	2	20	82-119	
2-Hexanone		50.0	50.8	102	47.7	95	6	20	81-130	
Dibromochloromethane		10.0	10.1	101	10.0	100	1	20	79-124	
1,2-Dibromoethane		10.0	10.1	101	9.9	99	2	20	82-116	
Chlorobenzene		10.0	10.0	100	10.0	100	0	20	86-114	
1,1,1,2-Tetrachloroethane		10.0	10.0	100	9.8	98	2	20	79-122	
Ethylbenzene		10.0	10.2	102	10.2	102	0	20	86-116	
Xylene (total)		30.0	30.7	102	30.3	101	1	20	85-117	
Styrene		10.0	10.3	103	10.2	102	1	20	84-119	
Bromoform		10.0	9.5	95	9.4	94	1	20	71-133	
Isopropylbenzene		10.0	10.6	106	10.5	105	1	20	77-117	
1,1,2,2-Tetrachloroethane		10.0	9.8	98	9.7	97	1	20	80-117	
Bromobenzene		10.0	10.1	101	9.9	99	2	20	84-120	
1,2,3-Trichloropropane		10.0	10.1	101	9.7	97	4	20	81-122	E4
n-Propylbenzene		10.0	10.4	104	10.1	101	-3	20	87-117	
2-Chlorotoluene		10.0	10.3	103	10.0	100	3	20	87-119	
1,3,5-Trimethylbenzene		10.0	10.3	103	10.2	102	. 1	20	83-120	

Comments:		

## ORGANIC ANALYSES DATA SHEET 7. LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE

Analytical Method: SW8		······································		AAB #:	D0602039	9				
Lab Name: Columbia A  Concentration Units (ug/L			iing			%Soli	ds:			
Parent Field Sample ID: 1	M1213W01	*****************	BS ID:	M1213	W01LCS	<del></del> .	BSD II	D: <u>M1213</u>	W01LCS	<u>D</u>
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q Q
Chlorotoluene		10.0	10.1	101	9.9	99	2	20	86-118	
t-Butylbenzene		10.0	8.8	88	10.3	103	. 16	20	82-122	
2,4-Trimethylbenzene		10.0	10.4	104	10.2	102	2	20	86-121	
-Butylbenzene		. 10.0	10.7	107	10.6	106	1	20	84-128	
-Dichlorobenzene		10.0	10.0	100	9.8	98	2	20	85-119	
sopropyltoluene		10.0	10.2	102	10.1	101	1	20	84-121	
-Dichlorobenzene		10.0	10.0	100	9.9	99	1	20	84-118	
Butylbenzene		10.0	9.8	98	9.8	98	0	20	81-123	
-Dichlorobenzene		10.0	10.0	100	9.9	99	1	20	85-117	
-Dibromo-3-chloropropane		40.0	38.6	96	36.7	92	5	20	67-121	
,4-Trichlorobenzene		10.0	9.8	98	9.8	98	0	20	69-128	
xachlorobutadiene		10.0	10.1	101	10.2	102	1	20	71-135	
phthalene		10.0	10.5	105	10.2	102	. 3	20	60-131	
,3-Trichlorobenzene		10.0	9.8	98	9.8	98	0	20	69-130	
Comments:				-		-				

### ORGANIC ANALYSES DATA SHEET 8 MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY

Analytical Method: SW8260		AAB #: <u>D0602039</u>	
Lab Name: Columbia Analytical Services/Red	ding		
Concentration Units (ug/L or mg/kg): UG/L		%S	olids:
Parent Field Sample ID: ASE-60A-6D2	MS ID:	ASE-60A-6D2MS	MSD ID: ASF-60A-6D2MSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Dichlorodifluoromethane		10.0	12.3	123	12.0	120	2	20	27-158	
Chloromethane		10.0	10.8	108	10.5	105	3	20	51-137	
Vinyl chloride		10.0	10.6	106	10.5	105	1	20	57-137	
Bromomethane		10.0	11.2	112	10.9	109	3	20	44-156	
Chloroethane		10.0	10.9	109	10.9	109	0	20	60-140	
Trichlorofluoromethane		10.0	11.8	118	11.1	111	6	20	54-146	
1,1-Dichloroethene	1.9	10.0	12.7	108	12.6	107	1	20	70-130	
Acetone	_	50.0	46.4	93	51.6	103	11	20	55-137	
Carbon disulfide		10.0	8.7	87	8.6	86	1	20	50-127	
Methylene chloride		10.0	10.0	100	10.0	100	0	20	73-121	
Iodomethane		10.0	9.6	96	9.5	95	1	20	50-150	E4
trans-1,2-Dichloroethene		10.0	9.8	98	9.6	96	2	20	74-124	
Tert-butylmethylether		10.0	10.0	100	10.0	100	0	20	75-119	. '
1,1-Dichloroethane	0.75	10.0	10.5	98	10.5	98	0	20	78-121	
Vinyl acetate		10.0	10.1	101	10.0	100	1	20	52-129	E4
2,2-Dichloropropane		10.0	9.6	96	9.6	96	0	20	61-137	
cis-1,2-Dichloroethene	0.32	10.0	10.6	103	10.5	102	1	20	80-118	1
2-Butanone		50.0	49.4	99	52.0	104	5	20	76-122	·
Bromochloromethane		10.0	9.9	<sup>'</sup> 99	9.7	97	2	20	82-118	
Chloroform	1.1	10.0	10.7	96	10.5	94	2	20	73-125	
1,1,1-Trichloroethane		10.0	9.6	96	9.5	95	1	20	76-124	
1,1-Dichloropropene		10.0	10.4	104	10.0	100	4	20	80-119	
Carbon tetrachloride		10.0	9.2	92	9.1	91	1	20	68-135	
Benzene		10.0	10.3	103	10.2	102	1	20	81-119	
1,2-Dichloroethane		10.0	10.0	100	9.7	97	3	20	75-122	
Trichloroethene	31.6	10.0	40.8	92	40.8	92	0	20	79-118	

Comments:		
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### ORGANIC ANALYSES DATA SHEET 8 MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY

Analytical Method: SW8260		AAB #: <u>D0602039</u>	April 10 Company Compa
Lab Name: Columbia Analytical Services/Red	ding	Printerior	
Concentration Units (ug/L or mg/kg): UG/L		%Se	olids:
Parent Field Sample ID: ASE-60A-6D2	MS ID	4 SE-60 4-6D2MS	MSD ID: ASE-60A-6D2MSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
1,2-Dichloropropane		10.0	9.9	99	9.6	96	3	20	82-115	
Dibromomethane		10.0	10.1	101	10.0	100	1	20	84-116	
Bromodichloromethane		10.0	9.5	95	9.4	94	1	20	81-122	
cis-1,3-Dichloropropene		10.0	9.7	97	9.6	96	1	20	78-118	
4-methyl-2-pentanone		50.0	51.2	102	52.0	104	2	20	81-127	
Toluene	0.15	10.0	10.0	98	9.8	96	2	20	83-116	
trans-1,3-Dichloropropene		10.0	9.4	94	9.2	92	2	20	73-122	
1,1,2-Trichloroethane		10.0	10.2	102	9.8	98	4	20	83-120	
Tetrachloroethene	2.0	10.0	12.4	104	12.0	100	3	20	82-118	
1,3-Dichloropropane		10.0	10.2	102	9.8	98	• 4	20	82-119	
2-Hexanone		50.0	49.4	99	50.4	101	2	20	81-130	
Dibromochloromethane		10.0	8.8	88	8.7	87	1	20	79-124	A TOTAL AND THE STREET
1,2-Dibromoethane		10.0	10.2	102	10.0	100	2	20	82-116	
Chlorobenzene	0.18	10.0	10.4	102	10.1	99	3	20	86-114	
1,1,1,2-Tetrachloroethane		10.0	9.4	94	9.3	93	1	20	79-122	
Ethylbenzene		10.0	10.3	103	10.2	102	1	20	86-116	
Xylene (total)		30.0	30.7	102	30.0	100	2	20	85-117	
Styrene		10.0	9.7	97	9.6	96	1	20	84-119	
Bromoform		10.0	7.8	78	7.8	78	0	20	71-133	-
lsopropylbenzene		10.0	10.7	107	10.4	104	3	20	77-117	
1,1,2,2-Tetrachloroethane		10.0	10.1	101	10.0	100	1	20	80-117	-
Bromobenzene		10.0	10.1	101	9.9	99	2	20	84-120	
1,2,3-Trichloropropane		10.0	9.9	99	9.9	99	0	20	81-122	E4
n-Propylbenzene	0.15	10.0	10.5	104	10.3	102	2	20	87-117	
2-Chlorotoluene		10.0	10.3	103	9.9	99	4	20	87-119	
1,3,5-Trimethylbenzene		10.0	10.4	104	9.4	94	10	20	83-120	

Comments:		
,		

### ORGANIC ANALYSES DATA SHEET 8 MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY

Analytical Method: SW826	0		. 1	AAB#:	D060203	9				
Lab Name: Columbia Ana	lytical Ser	vices/Redo	ling							
Concentration Units (ug/L or	mg/kg):	UG/L	-	-		%Soli	ds:			
Parent Field Sample ID: ASI	E-60A-6D	2	MS ID:	ASE-6	0A-6D2M	<u>S</u>	MSD II	D: <u>ASE-6</u>	0A-6D2M	SD_
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
4-Chlorotoluene		10.0	10.0	100	10.0	100	0	20	86-118	
tert-Butylbenzene		10.0	10.5	105	10.3	103	2	20	82-122	
1,2,4-Trimethylbenzene		10.0	10.3	103	10.2	102	1	20	86-121	-
sec-Butylbenzene		10.0	11.0	110	10.6	106	4	20	84-128	-
1,3-Dichlorobenzene		10.0	10.0	100	9.9	99	1	20	85-119	
p-Isopropyltoluene		10.0	10.3	103	10.0	100	3	20	84-121	
1,4-Dichlorobenzene		10.0	10.1	101	10.1	101	0	20	84-118	
n-Butylbenzene		10.0	10.0	100	9.8	98	2	20	81-123	
1,2-Dichlorobenzene		10.0	10.1	101	10.1	101	0	20	85-117	
1,2-Dibromo-3-chloropropane		40.0	34.2	86	36.3	91	6	- 20	67-121	
1,2,4-Trichlorobenzene		10.0	9.8	98	9.9	99	. 1	20	69-128	
Hexachlorobutadiene		10.0	9.8	98	10.0	100	2	20	71-135	
Naphthalene		10.0	10.0	100	10.8	108	8	20	60-131	
I,2,3-Trichlorobenzene		10.0	9.5	95	10.0	100	5	20	69-130	
										-
Comments:										

## ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: SW8260	AAB #:	D0602039	
Lab Name: Columbia Analytical Services/Redding	· -		
Instrument ID #: MSM DB-624			

Field Sample ID/Std ID/	Laboratory	Date Analysis	Time Analysis	Date Analysis	Time Analysis
Blank ID/QC Sample ID	File ID	Started	Started	Completed	Completed
VSTD00.5	M065370	12/05/06	1545	12/05/06	1605
VSTD001	M065371	12/05/06	1606	12/05/06	1626
VSTD005	M065372	12/05/06	1628	12/05/06	1648
VSTD010	M065373	12/05/06	1649	12/05/06	1709
VSTD020	M065374	12/05/06	1711	12/05/06	1731
VSTD050	M065375	12/05/06	1732	12/05/06	1752
VSTD100	M065376	12/05/06	1754	12/05/06	1814
VSTD150	M065377	12/05/06	1815	12/05/06	1835
QCALTSTD4	M065380	12/05/06	1920	12/05/06	1940
VSTD10M	M065500	12/13/06	1048	12/13/06	1108
M1213W01LCS	M065501	12/13/06	1110	12/13/06	1130
M1213W01LCSD	M065502	12/13/06	1131	12/13/06	1151
M1213W01	M065505	12/13/06	1235	12/13/06	1255
TB121106	M065506	12/13/06	1315	12/13/06	1335
PL-201A-6D2	M065507	12/13/06	1337	12/13/06	1357
ASE-58A-6D2	M065508	12/13/06	1358	12/13/06	1418
ASE-46A-6D2	M065509	12/13/06	1420	12/13/06	1440
PL-504-6D2	M065510	12/13/06	1441	12/13/06	1501
PL-2101-6D2	M065511	12/13/06	1503	12/13/06	1523
ASE-59A-6D2	M065514	12/13/06	1607	12/13/06	1627
ASE-61A-6D2	M065515	12/13/06	1628	12/13/06	1648
ASE-60A-6D2	M065516	12/13/06	1650	12/13/06	1710
ASE-60A-6D2MS	M065517	12/13/06	1711	12/13/06	1731
ASE-60A-6D2MSD	M065518	12/13/06	1733	12/13/06	1753
ASE-54A-6D2	M065521	12/13/06	1837	12/13/06	1857
PL-2102-6D2	M065522	12/13/06	1858	12/13/06	1918

Comments:		

# ORGANIC ANALYSES DATA SHEET APPENDIX A SURROGATE RESULTS

Analytical Method: SW8260			AAB #:						
Lab Name: Columbia Analy	tical Servic	es/Reddin	g						
Matrix: Water									
Field/QC Sample ID	S1.	S2	S3	S4	·S5	S6	S7	S8	Q
M1213W01LCS	102	102	101		-				
M1213W01LCSD	101	100	101						
M1213W01	102	101	101		·	***************************************			
TB121106	102	100	102						
PL-201A-6D2	101	103	101					,	
ASE-58A-6D2	101	99	102			-			
ASE-46A-6D2	102	100	102			-			
PL-504-6D2	102	100	100						
PL-2101-6D2	100	99	101			-			
ASE-59A-6D2	103	102	103						
ASE-61A-6D2	101	. 100	101						
ASE-60A-6D2	103	103	. 103						
ASE-60A-6D2MS	101	103	102			1,			
ASE-60A-6D2MSD	98	102	99						
ASE-54A-6D2	99	98	101						
PL-2102-6D2	100	100	100				i sir		-
									***************************************
		-							
		-				510-6			
S1: 4-Bromofluorobenzen S2: Dibromofluoromethan S3: Toluene-d8 - SS		84	-124 -127 -117			·		-	
Comments:	. •					-			

Redding, California 96003



December 28, 2006

Service Request No: D0602054

Shane Lowe CH2M Hill 2625 S. Plaza Drive Suite 300 Tempe, AZ 85282

**RE:** Sky Harbor/2959482

Dear Shane:

Enclosed are the results of the sample(s) submitted to our laboratory on December 13, 2006. For your reference, these analyses have been assigned our service request number D0602054.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 105. You may also contact me via email at MFesler@redding.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Mark Fesler

**Project Chemist** 

CC: Terri Krauss

Page 1 of 100

## **Current CAS Redding Accreditation Programs**

## Federal and National Programs

- U.S Air Force, Air Force Center for Environmental Excellence (AFCEE)

  Approved laboratory for Wastewater and Hazardous Waste
- U.S. Army Corps of Engineers MRD, HTRW Mandatory Center of Expertise
   Validated for Wastewater and Hazardous Waste
- Department of the Navy, Naval Facilities Engineering Service Center (NFESC)
   Approved laboratory for Wastewater and Hazardous Waste

### State and Local Programs

- State of Alaska, Department of Environmental Conservation
   Approved Laboratory for Contaminated Sites
   Lab ID UST-001
- State of Arizona, Department of Health Services, Office of Laboratory Licensure
   Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste
   Lab ID AZ0604
- State of California, Department of Health Services, National Environmental Laboratory Accreditation Program (NELAP)

Approved Laboratory for Drinking Water, Wastewater and Hazardous Waste Lab ID 01105CA

- Los Angeles County Sanitation District
   Approved Laboratory for Wastewater
   Lab ID 10243
- State of California, Department of Health Services, Environmental Laboratory Accreditation Program (ELAP)

Approved Laboratory for Microbiology of Drinking Water and Wastewater Lab ID 2635

- State of Florida, Department of Health, Bureau of Laboratories (NELAP)
   Approved Environmental Testing Laboratory for Wastewater and Hazardous Waste
- State of Kansas, Department of Health and Environment (NELAP)

Approved Laboratory for Hazardous Waste Lab ID E-10323

State of Massachusetts, Department of Environmental Protection

Approved laboratory for Drinking Water and Wastewater Lab ID M-CA025

• State of Oklahoma, Department of Environmental Quality

Approved Laboratory for General Water Quality/Sludge Testing Lab ID 9952

• State of Oregon, Environmental Laboratory Accreditation Program (ORELAP)

Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste Lab ID CA200004

• State of Utah, Department of Health, Bureau of Laboratory Improvement (NELAP)

Approved Laboratory for Wastewater and Hazardous Waste

Lab ID QUAL1

Lab ID E87203

• State of Washington, Department of Ecology

Approved Laboratory for Wastewater and Hazardous Waste Lab ID C1234

• State of Wisconsin, Department of Natural Resources

Approved Laboratory for Wastewater and Hazardous Waste Lab ID 999767340

### Arizona Data Qualifiers

Revision 2.0, 11/26/2003

# Developed by the Sub-committee of the Arizona Environmental Laboratory Advisory Committee

### Microbiology:

- A1 = Too numerous to count.
- A2 = Sample incubation period exceeded method requirement.
- A3 = Sample incubation period was shorter than method requirement.
- A4 = Target organism detected in associated method blank.
- A5 = Incubator/water bath temperature was outside method requirements.
- A6 = Target organism not detected in associated positive control.
- A7 = Micro sample received without adequate headspace.

### Method/calibration blank:

- B1 = Target analyte detected in method blank at or above the method reporting limit.
- B2 = Non-target analyte detected in method blank and sample, producing interference.
- B3 = Target analyte detected in calibration blank at or above the method reporting limit.
- B4 = Target analyte detected in blank at/above method acceptance criteria.
- B5 = Target analyte detected in method blank at or above the method reporting limit, but below trigger level or MCL.
- B6 = Target analyte detected in calibration blank at or above the method reporting limit, but below trigger level or MCL.
- B7 = Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above the concentration found in the method blank.

### Confirmation:

- C1 = Confirmatory analysis not performed as required by the method.
- C3 = Qualitative confirmation performed.
- C4 = Confirmatory analysis was past holding time.
- C5 = Confirmatory analysis was past holding time. Original result not confirmed.
- C6 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the higher value was reported as there was no obvious chromatographic interference.
- C7 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic interference.

### Dilution:

- D1 = Sample required dilution due to matrix.
- D2 = Sample required dilution due to high concentration of target analyte.
- D3 = Sample dilution required due to insufficient sample.
- D4 = Minimum reporting level (MRL) adjusted to reflect sample amount received and analyzed.

#### Estimated concentration:

- E1 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
- E2 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
- E3 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to holding time requirements.

## Arizona Data Qualifiers Revision 2.0, 11/26/2003

- E4 = Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL).
- E5 = Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL), but not confirmed by alternate analysis.
- E6 = Concentration estimated. Internal standard recoveries did not meet method acceptance criteria.
- E7 = Concentration estimated. Internal standard recoveries did not meet laboratory acceptance criteria.
- E8 = Analyte reported to MDL per project specification. Target analyte was not detected in the sample.

### Hold time:

- H1 = Sample analysis performed past holding time.
- H2 = Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
- H3 = Sample was received and analyzed past holding time.
- H4 = Sample was extracted past required extraction holding time, but analyzed within analysis holding time.

### BOD:

- K1 = The sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2 mg/L. Any reported result is an estimated value.
- K2 = The sample dilutions set up for the BOD analysis did not meet the criteria of a residual dissolved oxygen of at least 1 mg/L. Any reported result is an estimated value.
- K4 = The seed depletion was outside the method acceptance limits. The reported result is an estimated value.
- K5 = The dilution water D.O. depletion was > 0.2 mg/L.
- K6 = Glucose/glutamic acid BOD was below method acceptance criteria.
- K7 = A discrepancy between the BOD and COD results has been verified by reanalysis of the sample for COD.
- K8 = Glucose/glutamic acid BOD was above method acceptance levels.

## Laboratory fortified blank/blank spike:

- L1 = The associated blank spike recovery was above laboratory acceptance limits.
- L2 = The associated blank spike recovery was below laboratory acceptance limits.
- L3 = The associated blank spike recovery was above method acceptance limits.
- L4 = The associated blank spike recovery was below method acceptance limits.

### Matrix spike:

- M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.
- M2 = Matrix spike recovery was low, the method control sample recovery was acceptable.
- M3 = The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
- M4 = The analysis of the spiked sample required a dilution such that the spike concentration was diluted below the reporting limit. The method control sample recovery was acceptable.
- M5 = Analyte concentration was determined by the method of standard addition (MSA).

## Arizona Data Qualifiers Revision 2.0, 11/26/2003

M6 = Matrix spike recovery was high. Data reported per ADEQ policy 0154,000.

M7 = Matrix spike recovery was low. Data reported per ADEQ policy 0154.000.

#### General:

N1 = See case narrative.

N2 = See corrective action report.

N3 = The analysis meets all method requirements. See case narrative.

### Sample quality:

- Q1 = Sample integrity was not maintained. See case narrative.
- Q2 = Sample received with headspace.
- Q3 = Sample received with improper chemical preservation.
- Q4 = Sample received and analyzed without chemical preservation.
- Q5 = Sample received with inadequate chemical preservation, but preserved by the laboratory.
- Q6 = Sample was received above recommended temperature.
- Q7 = Sample inadequately dechlorinated.
- Q8 = Insufficient sample received to meet method QC requirements. Batch QC requirements satisfies ADEQ policies 0154 and 0155.
- Q9 = Insufficient sample received to meet method QC requirements.
- Q10 = Sample received in inappropriate sample container.
- Q11 = Sample is heterogeneous. Sample homogeneity could not be readily achieved using routine laboratory practices.

### **Duplicates:**

- R1 = RPD exceeded the method control limit. See case narrative.
- R2 = RPD exceeded the laboratory control limit. See case narrative.
- R4 = MS/MSD RPD exceeded the method control limit. Recovery met acceptance criteria.
- R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- R6 = LFB/LFBD RPD exceeded the method control limit. Recovery met acceptance criteria.
- R7 = LFB/LFBD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- R8 = Sample RPD exceeded the method control limit.
- R9 = Sample RPD exceeded the laboratory control limit.
- R10 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic problems.
- R11 = The RPD calculation for MS/MSD does not provide useful information due to the varying sample weights when Encore samplers/methanol field preserved samples are used.

#### Surrogate:

- S1 = Surrogate recovery was above laboratory acceptance limits, but within method acceptance limits.
- S3 = Surrogate recovery was above laboratory acceptance limits, but within method acceptance limits. No target analytes were detected in the sample.
- S4 = Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.
- S5 = Surrogate recovery was below laboratory acceptance limits, but within method acceptance limits.
- S6 = Surrogate recovery was below laboratory and method acceptance limits. Reextraction and/or reanalysis confirms low recovery caused by matrix effect.

## Arizona Data Qualifiers Revision 2.0, 11/26/2003

- S7 = Surrogate recovery was below laboratory and method acceptance limits. Unable to confirm matrix effect.
- S8 = The analysis of the sample required a dilution such that the surrogate recovery calculation does not provide any useful information. The method control sample recovery was acceptable.
- S10 = Surrogate recovery was above laboratory and method acceptance limits. See Case narrative.
- S11 = Surrogate recovery was high. Data reported per ADEQ policy 0154.000.
- S12 = Surrogate recovery was low. Data reported per ADEQ policy 0154.000.

### Method/analyte discrepancies:

- T1 = Method approved by EPA, but not yet licensed by ADHS.
- T2 = Cited ADHS licensed method does not contain this analyte as part of method compound list.
- T3 = Method not promulgated either by EPA or ADHS.
- T4 = Tentatively identified compound. Concentration is estimated and based on the closest internal standard.

#### Calibration verification:

- V1 = CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
- V2 = CCV recovery was above method acceptance limits. This target analyte was detected in the sample. The sample could not be reanalyzed due to insufficient sample.
- V3 = CCV recovery was above method acceptance limits. This target analyte was detected in the sample, but the sample was not reanalyzed. See case narrative.
- V4 = CCV recovery was below method acceptance limits. The sample could not be reanalyzed due to insufficient sample.
- V5 = CCV recovery after a group of samples was above acceptance limits. This target analyte was not detected in the sample. Acceptable per EPA Method 8000B.
- V6 = Data reported from one-point calibration criteria per ADEQ policy 0155.000.
- V7 = Calibration verification recovery was above the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
- V8 = Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.

### Calibration:

- W1 = The % RSD for this compound was above 20%. The average % RSD for all compounds in the calibration met the 20% criteria as specified in EPA method 8000B.
- W2 = The % RSD for this compound was above 15%. The average % RSD for all compounds in the calibration met the 15% criteria as specified in EPA method 8260B/8270C.

Client:

Project: Sky Harbor/2959482

Service Request: D0602054

## SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	<u>DATE</u>	<u>TIME</u>
D0602054-001	TB-121206	12/12/06	06:05
D0602054-002	ASE-64A-6D2	12/12/06	07:13
D0602054-003	PL-506-6D2	12/12/06	07:23
D0602054-004	ASE-63A-6D2	12/12/06	06:33
D0602054-005	ASE-39A-6D2	12/12/06	08:17
D0602054-006	ASE-38A-6D2	12/12/06	09:48
D0602054-007	PL-101A-6D2	12/12/06	09:02
D0602054-008	PL-508-6D2	12/12/06	09:58
D0602054-009	ASE-57A-6D2	12/12/06	10:37
D0602054-010	ASE-56A-6D2	12/12/06	11:17
D0602054-011	ASE-37A-6D2	12/12/06	12:50

# **CASE NARRATIVE**

Client:

Honeywell International, Incorporated

Service Request No.: D0602054

Project:

Sky Harbor

Date Received:

12/13/06

Sample Matrix: Aqueous

#### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables.

### Sample Receipt

11 Aqueous samples were received for analysis at Columbia Analytical Services on 12/13/06.

The following discrepancies were noted upon initial sample inspection and documented on the cooler receipt/preservation form included in this data package:

 Two sample containers were received broken for Methods SW8015M and SW8260. However, sufficient sample volume was available to perform analyses for all samples.

The samples were received in good condition and otherwise consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4 degrees Celsius upon receipt at the laboratory.

#### TPH-Diesel/Motor Oil by EPA Method 8015B

### Other:

Batch QC was run along with these samples. These results have been provided for informational purposes only. The Method Blank and Laboratory Control Samples were within control criteria. No anomalies were encountered during this analysis.

### Volatile Organic Compounds by EPA Method 8260B

#### **Elevated Method Reporting Limits:**

Samples ASE-63A-6D2, ASE-39A-6D2, ASE-38A-6D2, PL-101A-6D2, PL-101A-6D2, ASE-57A-6D2, and ASE-56A-6D2 required dilution due to the presence of elevated levels of target analytes. The reporting limits are adjusted to reflect the dilution.

Approved by:	Mark	fa	Date:	12/28/06

# CHAIN OF CUSTODY DOCUMENTATION

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ABE-666   ASE-666-692   Dec 12:2006   GW   WATER   S   X   X   X   X   X   X   X   X   X	7	1 Trip Blank	TB-121206	Dec 12 2006		LKWATER W		Т	×	×						
Assess	-	-2 ABE-85A	ASE-65A-602	Dec 12 2006		GW V		S2-8619	1-	×						
ABELSON   ARE-GRA-ROP-   Dec 12 2006   GW   WATER   S   X   X   X   X   X   X   X   X   X	-	1 12	ASE-62A-692	Dec 12 2006					×	×						
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		Relinquished by:		Company:		l		Date/		Received by	1-5	E. 1	()	7	CAS 12/3	9230 7
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11 CLLG. 400 710-5973



5090 Caterpillar Road Redding, CA 96003 Phone: (530) 244-5262

## COOLER RECEIPT FORM

Proje	ect/Client: Honeyweu Batch No.:
1.	Cooler(s)/Sample(s) received on: 12/13/06 Shipped via: UPS
	Shipping Bill # (s):# of Coolers/Packages
2.	Radiological Screening by: Acceptable Rejected
3.	Custody seals on outside of cooler:  If yes, where? Front Rear Lt Side Rt Side
	Seals intact: YES NO
Antonianosinha	COOLER/SAMPLE PROCESSING
4.	Sample Processing/Tagging by:
5.	Cooler(s)/Sample(s) Temp's: 1°c 1°c 1°c 1°c 1°c 1°c 1°c 1°c 1°c 1°c
6.	Type of packing material (circle): (Ice Blue Ice Bubble Wrap Bubble Bags (Zip Locks Webbing)
	Other:
7.	Custody papers properly filled out (ink, signed, dated, released, etc.)?
8.	Containers arrived in good condition (not broken, leaking, etc.)?
9.	Samples received with adequate holding time remaining to conduct analysis?  YES NO
10.	Container labels complete (i.e. analysis, preservation, date/time, etc.)?
11.	Container labels and tags agree with custody papers?  YES NO
12.	Correct types of containers used for the tests indicated?  YES NO
	a.) Adequate sample received? If not, note on Exception Report.
13.	Containers supplied by:
14.	Preserved containers received with the appropriate preservative?  pH: (or) See pH log.
15.	VOA vials free of air bubbles?  YES NO N/A
16.	Trip Blank preparation date: 12/1/06 CAS Other N/A
17.	Volatile Soil samples: Encores or Plugs in Vials
	Freezer or GC/MS Date:Time:N/A

See Exception Report for discrepancies.



5090 Caterpillar Road

Redding, CA 96003

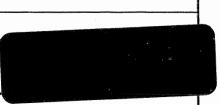
530-244-5227

FAX 530-244-4109

BAT	$\sim$ $\square$
ואט	CH.

CLIENT:

PROJECT:



	S	SAMPLE RECEIPT EXCEPTION REPORT
	1) Holding Time	SMO Technician / Date: ( MMW RUM 12/13/00
Issue	2) Temperature	Project Chemist / Date:
Туре	3) COC/Label	Client Contact(s):
Legend	4) Container	
	5) Other	
ltem #	Issue Type	DESCRIPTION
1	4	Na contract of the contract of
	,	These
	(	Transwest Geochem  3725 E Atlanta Ave Phoenix AZ 85040
	. (	602-437-0330
	(	ID: PL-506-6D2 6723
		rs: SW8015M  Preservative: None
		Manager
		1-Liter Amber Sampler: M. Wiese
		Teser
		Transwest Geochem 3725 E Atlanta Ave Phoenix AZ 85040
		602-437-0330   72   Client: Honeywell   Date &Time: Dec 44*2006
		Field Sample ID: ASE-37A-6D2 /250
		Test Parameters: SW8260
		Container No. 5 Preservative: HCI
		Container Type: 40ml VOA Sampler: M, W
		Corrective Actions Taken
1	(4) As	indicated above, two broken containers were
	6	B260 vox (40 nl NH vial). Addit saple containers
		B260 voa (40 ml NA vial). Addit saple containers
	ra	le available to proceed une gralyses. Foinformation
	pu	rpses only] role 12/14/26
	V I	, , , , , , , , , , , , , , , , , , , ,

## TPH - Diesel and Motor Oil

Client: Project: Honeywell International, Incorporated Sky Harbor/2959482

Service Request:

D0602054

Cover Page - Organic Analysis Data Package TPH-Diesel / Motor Oil Range Organics by SW8015B

		Date	Date
Sample Name	Lab Code	Collected	Received
ASE-64A-6D2	D0602054-002	12/12/2006	12/13/2006
PL-506-6D2	D0602054-003	12/12/2006	12/13/2006
ASE-63A-6D2	D0602054-004	12/12/2006	12/13/2006
ASE-39A-6D2	D0602054-005	12/12/2006	12/13/2006
ASE-38A-6D2	D0602054-006	12/12/2006	12/13/2006
PL-101A-6D2	D0602054-007	12/12/2006	12/13/2006
PL-508-6D2	D0602054-008	12/12/2006	12/13/2006
ASE-57A-6D2	D0602054-009	12/12/2006	12/13/2006
ASE-56A-6D2	D0602054-010	12/12/2006	12/13/2006
ASE-37A-6D2	D0602054-011	12/12/2006	12/13/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:	Wida Ang	Name:_	WIDA	ANG
Date:	6/21/06	Title:	Organic	Manager

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Ground water

Service Request: D0602054

**Date Collected:** 12/12/2006

**Date Received:** 12/13/2006

## TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

Sample Matrix:

ASE-64A-6D2

Lab Code:

D0602054-002

Units: ug/L Basis: NA

Extraction Method: EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	350 J	480	20	1	12/18/06	12/20/06	E4
C22 - C32 HRO (TPH-Motor Oil)	43 J	480	30	1 -	12/18/06	12/20/06	E4

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
				Note	
Octacosane	79	26-152	12/20/06		
Tricontane	78	40-140	12/20/06		

Comments:

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SuperSet Reference: RR13320

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602054

**Date Collected: 12/12/2006** 

**Date Received:** 12/13/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

PL-506-6D2

Lab Code:

D0602054-003

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	460 J	480	20	1	12/18/06	12/20/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/18/06	12/20/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	86	26-152	12/20/06		
Tricontane	85	40-140	12/20/06		

Comments:

Printed: 12/21/2006 12:41:46 

SuperSet Reference:

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602054

**Date Collected:** 12/12/2006

**Date Received:** 12/13/2006

## TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-63A-6D2

Lab Code:

Units: ug/L

D0602054-004

Basis: NA

Extraction Method:

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

C10 - C22 DRO (TPH-Diesel) 300 J 480 20 1 12/18/06 12/20/06 E4	Note	Date Analyzed	Date Extracted	Dilution Factor	MDL	PQL	Result Q	Analyte Name
C22 - C32 HRO (TPH-Motor Oil) ND 11 480 30 1 12/18/06 12/20/06	E4	12/20/06 12/20/06	12/18/06 12/18/06	1 .	20 30	480 480	<b>300</b> J ND U	C10 - C22 DRO (TPH-Diesel) C22 - C32 HRO (TPH-Motor Oil)

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	74	26-152	12/20/06		
Tricontane	73	40-140	12/20/06		

Comments:

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Form 1A - Organic

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SuperSet Reference:

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Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

**Date Collected:** 12/12/2006

Service Request: D0602054

Sample Matrix:

Ground water

**Date Received:** 12/13/2006

## TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-39A-6D2

Lab Code:

Units: ug/L

D0602054-005

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	<b>220</b> J	480	20	1	12/18/06	12/20/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/18/06	12/20/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Octacosane	83	26-152	12/20/06	
Tricontane	82	40-140	12/20/06	

Comments:

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Analytical Results

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602054

**Date Collected:** 12/12/2006

**Date Received:** 12/13/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-38A-6D2

Lab Code:

D0602054-006

Units: ug/L Basis: NA

Extraction Method: EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note	
C10 - C22 DRO (TPH-Diesel) C22 - C32 HRO (TPH-Motor Oil)	<b>260</b> J ND U	480 480	20 30	1 1	12/18/06 12/18/06	12/20/06 12/20/06	E4	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane Tricontane	88 87	26-152 40-140	12/20/06 12/20/06		

Comments:

Printed: 12/21/2006 12:41:49

SuperSet Reference:

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602054

**Date Collected:** 12/12/2006

**Date Received:** 12/13/2006

## TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

PL-101A-6D2

Lab Code:

Units: ug/L

D0602054-007

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel) C22 - C32 HRO (TPH-Motor Oil)	<b>500</b> ND U	480 480	20 30	1	12/18/06 12/18/06	12/21/06 12/21/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
ctacosane	83	26-152	12/21/06			
Tricontane	81	40-140	12/21/06			

Comments:

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Analytical Results

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602054

**Date Collected:** 12/12/2006

**Date Received:** 12/13/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

PL-508-6D2

Lab Code:

D0602054-008

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	<b>220</b> J	480	20	1	12/18/06	12/21/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/18/06	12/21/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	·	
Octacosane	87	26-152	12/21/06			
Tricontane	86	40-140	12/21/06			

**Comments:** 

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Form 1A - Organic

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Analytical Results

Client:

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602054

**Date Collected:** 12/12/2006 **Date Received:** 12/13/2006

## TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-57A-6D2

Lab Code:

D0602054-009

Units: ug/L Basis: NA

Extraction Method: EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	3700	480	20	1	12/18/06	12/21/06	
C22 - C32 HRO (TPH-Motor Oil)	66 J	480	30	1	12/18/06	12/21/06	E4

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
Octacosane	87	26-152	12/21/06			
Tricontane	86	40-140	12/21/06			

Comments:

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Analytical Results

Client:

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602054

**Date Collected:** 12/12/2006

**Date Received:** 12/13/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-56A-6D2

Lab Code:

D0602054-010

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

Analysta Nama	Docult O	POL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Analyte Name	Result Q	PQL	MDL	ractor	Extracted	Analyzeu	Note
C10 - C22 DRO (TPH-Diesel)	1600	480	20	1	12/18/06	12/21/06	
C22 - C32 HRO (TPH-Motor Oil)	34 J	480	30	1	12/18/06	12/21/06	E4

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Octacosane	81	26-152	12/21/06	
Tricontane	81	40-140	12/21/06	

Comments:

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SuperSet Reference:

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Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Ground water

Service Request: D0602054

**Date Collected: 12/12/2006** 

**Date Received:** 12/13/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

Sample Matrix:

ASE-37A-6D2

Lab Code:

D0602054-011

Units: ug/L Basis: NA

Extraction Method: EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel) C22 - C32 HRO (TPH-Motor Oil)	180 J ND U	480 480	20 30	1	12/18/06 12/18/06	12/21/06 12/21/06	E4

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
e	83	26-152	12/21/06	
Tricontane	82	40-140	12/21/06	

Comments:

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SuperSet Reference: RR13320

Analytical Results

Client:

Honeywell International, Incorporated

Project: Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602054

Date Collected: NA

Date Received: NA

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

Method Blank

Lab Code:

DWG0601071-4

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed N	ote
C10 - C22 DRO (TPH-Diesel)	ND U	500	20	1	12/18/06	12/20/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	500	30	1	12/18/06	12/20/06	

06 06	urrogate Name
	%Rec Limits
06	76 26-152 12/2
	74 40-140

Comments:

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SuperSet Reference:

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QA/QC Report

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602054

Surrogate Recovery Summary

TPH-Diesel / Motor Oil Range Organics by SW8015B

**Extraction Method: Analysis Method:** 

EPA 3510C

8015B

Units: PERCENT

Level: Low

Sample Name	<u>Lab Code</u>	Sur1	Sur2
ASE-64A-6D2	D0602054-002	79	78
PL-506-6D2	D0602054-003	86	85
ASE-63A-6D2	D0602054-004	74	73
ASE-39A-6D2	D0602054-005	83	82
ASE-38A-6D2	D0602054-006	88	87
PL-101A-6D2	D0602054-007	83	81
PL-508-6D2	D0602054-008	87	86
ASE-57A-6D2	D0602054-009	87	86
ASE-56A-6D2	D0602054-010	81	81
ASE-37A-6D2	D0602054-011	83	82
Method Blank	DWG0601071-4	76	74
Batch QC	D0602066-004	79	78
Batch QCMS	DWG0601071-1	72	70
Batch QCDMS	DWG0601071-2	82	80
Lab Control Sample	DWG0601071-3	89	86
•			

### Surrogate Recovery Control Limits (%)

26-152 Sur1 = Octacosane Sur2 = Tricontane 40-140

Results flagged with an asterisk (\*) indicate values outside control criteria. Results flagged with a pound (#) indicate the control criteria is not applicable.

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SuperSet Reference: RR13320

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QA/QC Report

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602054

Date Extracted: 12/18/2006

**Date Analyzed:** 12/20/2006

Matrix Spike/Duplicate Matrix Spike Summary TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

Batch QC

Lab Code:

D0602066-004

Units: ug/L Basis: NA

**Extraction Method: Analysis Method:** 

EPA 3510C

Level: Low

8015B

Extraction Lot: DWG0601071

Batch QCMS

DWG0601071-1

Batch QCDMS

DWG0601071-2

Matrix Spike **Duplicate Matrix Spike** RPD Sample %Rec **RPD** Result Limits Limit %Rec %Rec **Analyte Name** Result Expected Result Expected C10 - C22 DRO (TPH-Diesel) 720 1790 2380 45 M2 2170 2380 61 61-143 19 30

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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RR13320 SuperSet Reference:

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QA/QC Report

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602054

**Date Extracted:** 12/18/2006

**Date Analyzed:** 12/20/2006

Lab Control Spike Summary TPH-Diesel / Motor Oil Range Organics by SW8015B

**Extraction Method:** 

EPA 3510C

**Analysis Method:** 

8015B

Units: ug/L

Basis: NA

Level: Low

Extraction Lot: DWG0601071

Lab Control Sample DWG0601071-3

Lab Control Spike

	Lau	Controt Spik	С	%Rec	
Analyte Name	Result	Expected	%Rec	Limits	
C10 - C22 DRO (TPH-Diesel)	1550	2500	62	61-143	
C22 - C32 HRO (TPH-Motor Oil)	1760	2500	70	60-120	

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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SuperSet Reference: RR13320

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## GC/MS VOLATILE ORGANICS

## ORGANIC ANALYSES DATA PACKAGE

Analytical Method	: SW8260	AAB	#: <u>D0602054</u>		
Lab Name: Colum	nbia Analytical Services/Redding				
Base/Command:/	ARIZONA DELIVERABLES	_			
Project: Sky H	arbor				
	Field Sample ID		Lab Sample ID		
	TB-121206		D0602054-001		
	ASE-64A-6D2		D0602054-002		
	PL-506-6D2	<u> </u>	D0602054-003	<u> </u>	
	ASE-63A-6D2		D0602054-004		
	ASE-39A-6D2	-	D0602054-005		
	ASE-38A-6D2		D0602054-006		
	PL-101A-6D2		D0602054-007		
	PL-508-6D2		D0602054-008		
	ASE-57A-6D2		D0602054-009		
	ASE-56A-6D2		D0602054-010		
	ASE-37A-6D2		D0602054-011		
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Comments:					
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	ackage is in compliance with the terms				
	other than the conditions detailed above				
	r-readable data submitted on diskette h		orized by the Laborato	ry Manager or th	ne
Manager's designed	e, as verified by the following signature	<b>)</b> .			
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Signature:	/ 3 / /) N	ame: 13	MANIY) DOVE		
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Date:		itie: <u>/ e</u>	CHNIBAL MANA	iger_	
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RDD-061221:DK:BS-1437PST-SR:D0602054-D0602054-V

Analytical Method: SW8260			AAB #: D0602054
Lab Name: Columbia Analytical Serv	vices/Redding		
Field Sample ID: TB-121206	Lab Sample ID:	D0602054-001	Matrix: Water
% Solids:		Initial Calib	oration ID: 12/05/06MSM
Date Received: 12/13/06	Date Extracted:	Date Anal	lyzed: _12/14/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	. 1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	1.8	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	ND	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1 .		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		31.00.0011
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:		Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Analytical Method: SW8260		AAB #: <u>D0602054</u>		
Lab Name: Columbia Analytical S	Services/Redding			
Field Sample ID: TB-121206	Lab Sample ID: DO	0602054-001	Matrix: Water	· 
% Solids:		Initial Calibr	ration ID: 12/05/06	MSM
Date Received: 12/13/06	Date Extracted:	Date Analy	yzed: 12/14/06	
Concentration Units (ug/L or ug/Vg	dry weight): UG/I	Sample Volume	5 000 MI	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	ND	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		-
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1	·	
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:		Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Analytical M	ethod: SW8260						AAB #:_ <u>D</u>	0602054		
Lab Name:	Columbia Analyti	cal Services/Re	edding							
Field Sample	ID: TB-121206		La	ab Sample ID:	D0602	054-001	Matrix: V	Vater		
% Solids:				•	Initial Calibration ID: 12/05/06MSM					
	d: 12/13/06	Date I	Extracte	d:			_			
	n Units (ug/L or ug								***************************************	
Analyte			MDI			oncentration	<u> </u>	Confirm	Qualifier	
·	Analyte		WIDE	Z KL	+	oncentration .	Diution	Commin	Quanner	
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			···········							
	Sur	rogate	T	Recovery		Control Limit	s Qua	lifier		
	4-Bromofluorob			102		82-124				
	Dibromofluoron			100		84-127				
	Toluene-d8 - SS			100		80-117				
	Leaconstance					T		·		
			······	Standard		Qualifier	-			
	Fluorobenzene Chlorobenzene-d5									
I,4-Dichlorobenze				-d4						
						Surrogate Recov				
Comments:						Internal Stand	ards are repor	ted in Append	lix O-C	

Analytical Method: SW8260		AAB	#:
Lab Name: Columbia Analytical Service	es/Redding		
Field Sample ID: ASE-64A-6D2	Lab Sample ID:	D0602054-002 Matri	x: Water
% Solids:		Initial Calibration	ID: <u>12/05/06MSM</u>
Date Received: 12/13/06	Date Extracted:	Date Analyzed:	12/14/06
Concentration Units (ug/L or ug/Kg dry v	veight): <u>UG/L</u>	Sample Volume: 5.00	00 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1	·	
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	11		
Tert-butylmethylether	0.17	1.0	2.1	1		
1,1-Dichloroethane	0.12	2.0	0.83	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.28	1		E4
2-Butanone	0.90	10	ND ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	85	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		·
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.29	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:		Internal Standards are reported in Appendix O-C
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Analytical Method: SW8260	AAB #: <u>D0602054</u>
Lab Name: Columbia Analytical Services/Redding	<u> </u>
Field Sample ID: ASE-64A-6D2 L	ab Sample ID: D0602054-002 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/13/06 Date Extracted	ed: Date Analyzed: 12/14/06
Concentration Units (ug/L or ug/Kg dry weight):	G/L Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
I,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	ND	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1	·	
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	110	1		
Xylene (total)	0.14	10	220	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	55	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	-1		
n-Propylbenzene	0.13	2.0	31	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	14	1		
4-Chlorotoluene	0.16	5.0	" ND	1	-	
tert-Butylbenzene	0.18	5.0	1.0	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	60	1		
sec-Butylbenzene	0.17	5.0	5.2	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	1.9	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1	,	
Naphthalene	0.29	2.0	64	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Me	thod: SW8260		_					AAB#:_D	0602054	
Lab Name:	Columbia Analyti	cal Services/	Redding							
	ID: ASE-64A-6				mple ID: D	06020	054-002	Matrix: V	Vater	
% Solids:							Initial Calib			SM
	l: <u>12/13/06</u>	Dat	e Extrac	ted:						
	Units (ug/L or ug									***************************************
	Analyte		MI	)L	RL	Co	oncentration	Dilution	Confirm	Qualifier
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			<u> </u>							** ***********************************
		rogate		F	Recovery	-	Control Limit	ts Qualifier		
	4-Bromofluorob Dibromofluoron		. :		102	<u> </u>	82-124 84-127			
	Toluene-d8 - SS				97		80-117			
			MATERIA MATERIA PARA PARA PARA PARA PARA PARA PARA P							
			Interna	ıl Stan	dard		Qualifier			
		Fluorobenz								
	Chlorobenzene-d5									
		1,4-Dichlor	robenzen	ie-d4	<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>					
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Comments:							Surrogate Recove Internal Stand			
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Analytical Method: SW8260	·		AAB #: <u>D0602054</u>
Lab Name: Columbia Analytical So	ervices/Redding		
Field Sample ID: PL-506-6D2	Lab Sample II	D: D0602054-003	Matrix: Water
% Solids:		Initial Ca	libration ID: 12/05/06MSM
Date Received: 12/13/06	Date Extracted:	Date A	nalyzed: 12/14/06
Concentration Units (ug/L or ug/Kg of	dry weight): <u>UG/L</u>	Sample Volume	e: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	1.1	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	2.1	1		
1,1-Dichloroethane	0.12	2.0	0.83	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.27	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		,
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	86	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.30	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	···		AAB #: D0602054
Lab Name: Columbia Analytical Services	/Redding		
Field Sample ID: PL-506-6D2	Lab Sample ID:	D0602054-003	Matrix: Water
% Solids:		Initial Calib	ration ID: 12/05/06MSM
Date Received: 12/13/06 Da	te Extracted:	Date Anal	yzed: 12/14/06
Concentration Units (ug/L or ug/Kg dry wei	ght): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.23	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	120	1		
Xylene (total)	0.14	10	240	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1 .		
Isopropylbenzene	0.17	2.0	57	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	11		
Bromobenzene	0.17	5.0	ND	11		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	32	1		
2-Chlorotoluene	0.16	5.0	ND	11		
1,3,5-Trimethylbenzene	0.15	2.0	15	1		
4-Chlorotoluene	0.16	5.0	. ND	1		
tert-Butylbenzene	0.18	5.0	0.87	1 .		E4
1,2,4-Trimethylbenzene	0.13	2.0	61	1		
sec-Butylbenzene	0.17	5.0	5.5	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	2.0	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	71	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Mo	ethod: SW8260							AAB #:D	0602054	
Lab Name:	Columbia Analyti	cal Services/	Redding	· -						
Field Sample	ID: <u>PL-506-6D2</u>	2		Lab S	ample I <u>D:</u> I	00602	054-003	Matrix: _V	Vater	
% Solids:							Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: <u>12/13/06</u>	Date	e Extrac	ted: _			Date Anal	yzed: <u>12/1</u>	4/06	
Concentration	u Units (ug/L or ug	g/Kg dry weig	ght): <u> </u>	JG/L		_ San	nple Volume:	_5.000 M	<u>L</u>	
	Analyte		MI	)L	RL	C	oncentration	Dilution	Confirm	Qualifier
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	Sur	rogate			Recovery	T	Control Limit	s Oua	lifier	)-
	4-Bromofluorob				101		82-124			
	Dibromofluoron				98	_	84-127	-		
	Toluene-d8 - SS				98		80-117			
			Interna	ıl Star	ıdard		Qualifier		·····	
		Fluorobenz	ene							
		Chlorobenz								
		1,4-Dichlor	obenzen	ie-d4						
							Surrogate Recov	eries are reno	ted in Annend	lix O-A
Comments:							Internal Stand			
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Analytical Method: SW8260	AAB#: D0602054
Lab Name: Columbia Analytical Services/Redding	_
Field Sample ID: ASE-63A-6D2 La	b Sample ID: D0602054-004 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/13/06 Date Extracted	: Date Analyzed: 12/14/06
Concentration Units (ug/L or ug/Kg dry weight): UG	/L Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.24	1		E4
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	270	1		
1,1-Dichloroethane	0.12	2.0	0.47	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	7.5	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	470	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	3.7	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.36	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB#: D0602054
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-63A-6D2 Lab Sample ID:	D0602054-004 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/13/06 Date Extracted:	Date Analyzed: 12/14/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.36	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	180	1		-
Xylene (total)	0.14	10	4.1	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	58	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	. ND	1		
n-Propylbenzene	0.13	2.0	47	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	0.16	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.75	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	0.78	1		E4
sec-Butylbenzene	0.17	5.0	5.1	1		
1,3-Dichlorobenzene	0.11	1.0	ND	I		
p-Isopropyltoluene	0.10	2.0	0.14	1		E4
1,4-Dichlorobenzene	0.11	1.0	0.12	1		E4
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
I,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	99	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C
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Analytical Me	ethod: SW8260						AAB #: <u>D</u>	0602054	
Lab Name:	Columbia Analyti	cal Services/Red	lding						
Field Sample	ID: ASE-63A-6	5D2	Lab S	Sample ID: I	00602	054-004	Matrix: V	√ater	
% Solids:				•		Initial Calib			SM
Date Received	d: 12/13/06	Date Ex	xtracted:			Date Anal	yzed: 12/1	4/06	
Concentration	Units (ug/L or ug								
			MDL	RL	<u> </u>			I	01:6-
	Analyte		MIDL	KL	+	oncentration	Dilution	Confirm	Qualifie
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	Cur	rogate	1	Recovery		Control Limit	S 0110	lifier	
	4-Bromofluorob			102	<u> </u>	82-124	s Qua	miei	
4	Dibromofluoron			97		84-127			
	Toluene-d8 - SS			98	-	80-117			
					<u></u>				
		Int	ternal Sta	ndard		Qualifier			
		Fluorobenzene							
		Chlorobenzene							
	:	1,4-Dichlorobe	enzene-u4			<u> </u>			
						a -			. o .
Comments:						Surrogate Recover Internal Stand			

Analytical Method: SW8260 AAB #: D0602054				
Lab Name: Columbia Analytical Serv	ices/Redding			
Field Sample ID: ASE-63A-6D2DL	Lab Sample ID: D0602054-004DL Matrix: Water			
% Solids:	Initial Calibration ID: 12/05/06MSM			
Date Received: 12/13/06	Date Extracted: Date Analyzed: 12/14/06			
Concentration Units (ug/L or ug/Kg dry	weight): IIG/I Sample Volume: 5 000 MI			

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	14	200	ND	40		D2
Chloromethane	9.2	200	ND	40		D2
Vinyl chloride	8.8	40	ND	40		D2
Bromomethane	11	.40	ND	40		D2
Chloroethane	8.0	200	ND	40		D2
Trichlorofluoromethane	5.6	200	ND	40		D2
1,1-Dichloroethene	7.6	80	ND	40		D2
Acetone	40	800	ND	40		D2
Carbon disulfide	4.4	200	ND	40		D2
Methylene chloride	6.0	200	ND	40		D2
Iodomethane	8.0	400	ND	40		D2
trans-1,2-Dichloroethene	6.4	80	ND	40		D2
Tert-butylmethylether	6.8	40	400	40		D2
1,1-Dichloroethane	4.8	80	ND	40		D2
Vinyl acetate	34	1000	ND	40	-	D2
2,2-Dichloropropane	13	80	ND	40		D2
cis-1,2-Dichloroethene	6.8	80	8.1	40		D2E4
2-Butanone	36	400	ND	40		D2
Bromochloromethane	10	200	ND	40	-	D2
Chloroform	5.6	80	8.6	40	-	D2E4
1,1,1-Trichloroethane	5.6	80	ND	40		D2
1,1-Dichloropropene	7.2	80	ND	40		D2
Carbon tetrachloride	7.2	80	ND	40		D2
Benzene	4.8	40	3700	40		D2
1,2-Dichloroethane	7.2	40	ND	40		D2
Trichloroethene	4.0	40	ND	40		D2
1,2-Dichloropropane	6.8	80	ND	40		D2
Dibromomethane	7.2	80	ND	40		D2
Bromodichloromethane	6.8	40	ND	40		D2
cis-1,3-Dichloropropene	5.2	80	ND	40		D2
4-methyl-2-pentanone	34	400	ND	40		D2
Toluene	5.6	80	ND	40		D2
trans-1,3-Dichloropropene	7.6	80	ND	40		D2

Comments:	S	urrogate Recoveries are reported in Appendix O Internal Standards are reported in Appendix O-(	
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Analytical Method: SW8260			AAB #:
Lab Name: Columbia Analytical Ser	vices/Redding		
Field Sample ID: ASE-63A-6D2DL	Lab Sample ID:	D0602054-004DL	Matrix: Water
% Solids:		Initial Calib	bration ID: 12/05/06MSM
Date Received: 12/13/06	Date Extracted:	Date Ana	llyzed: 12/14/06
Concentration Units (ug/L or ug/Kg dr	y weight): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	8.8	40	ND	40		D2
Tetrachloroethene	8.8	40	ND	40		D2 .
1,3-Dichloropropane	4.4	80	ND	40		D2
2-Hexanone	23	400	ND	40		D2
Dibromochloromethane	6.0	80	ND	40		D2
1,2-Dibromoethane	6.0	80	ND	40		D2
Chlorobenzene	6.0	40	ND	40		D2
1,1,1,2-Tetrachloroethane	9.2	200	ND	40		D2
Ethylbenzene	6.0	80	670	40		D2 -
Xylene (total)	5.6	400	ND	40		D2
Styrene	6.4	80	ND	40		D2
Bromoform	7.2	200	ND	40		D2
Isopropylbenzene	6.8	80	62	40		D2E4
1,1,2,2-Tetrachloroethane	6.8	40	ND	40	·	D2
Bromobenzene	6.8	200	ND	40		D2
1,2,3-Trichloropropane	8.0	400	ND	40		D2
n-Propylbenzene	5.2	80	46	40		D2E4
2-Chlorotoluene	6.4	200	ND	40		D2
1,3,5-Trimethylbenzene	6.0	. 80	ND	40		D2
4-Chlorotoluene	6.4	200	ND	40		D2
tert-Butylbenzene	7.2	200	ND	40		D2
1,2,4-Trimethylbenzene	5.2	80	ND	40		D2
sec-Butylbenzene	6.8	200	ND	40		D2
1,3-Dichlorobenzene	4.4	40	ND	40		D2
p-Isopropyltoluene	4.0	80	ND	40		D2
1,4-Dichlorobenzene	4.4	40	ND	40		D2
n-Butylbenzene	13	200	ND	40		D2
1,2-Dichlorobenzene	5.6	40	ND	40		D2
1,2-Dibromo-3-chloropropane	32	200	ND	40		D2
1,2,4-Trichlorobenzene	14	200	ND	40		D2
Hexachlorobutadiene	24	40	ND	40		D2
Naphthalene	12	80	220	40		D2
1,2,3-Trichlorobenzene	15	200	ND	40		D2

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C

Analytical M	ethod: <u>SW8260</u>						AAB #: <u>D</u>	0602054	· · · · · · · · · · · · · · · · · · ·
Lab Name:	Columbia Analyti	ical Services/Redding	3						
Field Sample	ID: <u>ASE-63A-6</u>	5D2DL	Lab Sa	ample ID: D	0602	054-004DL	Matrix: V	Vater	
% Solids:						Initial Calib	ration ID:	12/05/06M	SM
Date Receive	d: 12/13/06	Date Extrac	cted:			Date Anal	yzed: <u>12/1</u>	4/06	
		g/Kg dry weight): _							
	Analyte	M	DL	RL	C	oncentration	Dilution	Confirm	Qualifier
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•	Sur	rrogate	]	Recovery	(	Control Limits	Qua	lifier	"
	4-Bromofluorob			101		<b>82-1</b> 24			
	Dibromofluoron		-	98	<u> </u>	84-127			
	Toluene-d8 - SS	<b>5</b>		99		80-117			
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		Intern	al Star	ıdard		Qualifier	_		
		Fluorobenzene Chlorobenzene-d5							
		1,4-Dichlorobenze	ne-d4						
			*****				<b>!</b>		
						Surrogate Recove	eries are reno	rted in Appena	lix O-A
Comments:						Internal Stand			
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Analytical Method: SW8260	<u></u>		AAB #:I	00602054
Lab Name: Columbia Analytical Ser	vices/Redding			
Field Sample ID: ASE-39A-6D2	Lab Sample ID:	D0602054-005	Matrix: _	Water
% Solids:		Initial Calib	oration ID:	12/05/06MSM
Date Received: 12/13/06	Date Extracted:	Date Anal	lyzed: <u>12/</u>	14/06
Concentration Units (ug/L or ug/Kg dr	y weight): UG/L	Sample Volume:	_5.000 M	IL_

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		-
Chloroethane	0.20	5.0	·ND	l		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.35	1		E4
Acetone	1.0	20	2.0	. 1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	280	1		
1,1-Dichloroethane	0.12	2.0	0.60	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	5.2	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		·
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	250	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	3.0	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.20	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB #: <u>D0602054</u>	
Lab Name: Columbia Analytical Ser	vices/Redding	
Field Sample ID: ASE-39A-6D2	Lab Sample ID: D0602054-005 Matrix: Water	
% Solids:	Initial Calibration ID: 12/05/06MSM	
Date Received: 12/13/06	Date Extracted: Date Analyzed:	
Concentration Units (ug/L or ug/Kg da	weight): UG/L Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1.		
Tetrachloroethene	0.22	1.0	ND	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	120	1		
Xylene (total)	0.14	10	120	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	42	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1	-	
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	26	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	5.4	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	1.0	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	21	1		
sec-Butylbenzene	0.17	5.0	5.3	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.71	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1	·	
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	63	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Me	ethod: SW8260							AAB #: _ D	0602054	
Lab Name:	Columbia Analyti	cal Services/	Redding	<u></u>						
Field Sample	ID: <u>ASE-39A-6</u>	D2		Lab Sa	mple ID: Do	602	054-005	Matrix: V	Vater	
% Solids:							Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: 12/13/06	Dat	e Extrac	ted: _			Date Anal	yzed: 12/1	4/06	
Concentration	n Units (ug/L or ug	/Kg dry weig	ght): <u> </u>	UG/L		Sam	ple Volume:	5.000 M	<u>L</u>	
	Analyte		MI	)L	RL	C	oncentration	Dilution	Confirm	Qualifier
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		rogate		F	Recovery	-	Control Limit	s Qua	lifier	
	4-Bromofluorob Dibromofluoron				98 98	_	82-124 84-127			
	Toluene-d8 - SS				100		80-117			
		-								
			Interna	al Stan	dard		Qualifier			
		Fluorobenz					<b>X</b>			
		Chlorobenz								
		1,4-Dichlor	obenzer	ne-d4						
Comments:							Surrogate Recov Internal Stand			
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Analytical Method: SW8260	AAB #: <u>D0602054</u>
Lab Name: Columbia Analytical Serv	ces/Redding
Field Sample ID: ASE-39A-6D2DL	Lab Sample ID: D0602054-005DL Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/13/06	Date Extracted: Date Analyzed: 12/14/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	14	200	ND	40		D2
Chloromethane	9.2	200	ND	40		D2
Vinyl chloride	8.8	40	ND	40		D2
Bromomethane	11	40	ND	40		D2
Chloroethane	8.0	200	ND	40		D2
Trichlorofluoromethane	5.6	200	ND	40		D2
1,1-Dichloroethene	7.6	80	ND	40		D2
Acetone	40	800	ND	40		D2
Carbon disulfide	4.4	200	ND	40		D2
Methylene chloride	6.0	200	ND	40		D2
Iodomethane	8.0	400	ND	40		D2
trans-1,2-Dichloroethene	6.4	80	ND	40		D2
Tert-butylmethylether	6.8	40	490	40		D2
1,1-Dichloroethane	4.8	80	ND	40		D2
Vinyl acetate	34	1000	ND	40		D2
2,2-Dichloropropane	13	80	ND	40		D2
cis-1,2-Dichloroethene	6.8	80	ND	40		D2
2-Butanone	36	400	ND	40		D2
Bromochloromethane	10	200	ND	40		D2
Chloroform	5.6	80	10	40		D2E4
1,1,1-Trichloroethane	5.6	80	ND	40		D2
1,1-Dichloropropene	7.2	80	ND	40		D2
Carbon tetrachloride	7.2	80	ND	40		D2
Benzene	4.8	40	900	40		D2
1,2-Dichloroethane	7.2	40	ND	40		D2
Trichloroethene	4.0	40	ND	40		D2
1,2-Dichloropropane	6.8	80	ND	40		D2
Dibromomethane	7.2	80	ND	40		D2
Bromodichloromethane	6.8	40	ND	40		D2
cis-1,3-Dichloropropene	5.2	80	ND	40		D2
4-methyl-2-pentanone	34	400	ND	40		D2
Toluene	5.6	80	ND	40		D2
trans-1,3-Dichloropropene	7.6	80	ND	40		D2

Comments:	Internal Standards are reported in Appendix O-C

Analytical Method: SW8260			AAB #:_	D0602054
Lab Name: Columbia Analytical Ser	vices/Redding			
Field Sample ID: ASE-39A-6D2DL	Lab Sample ID:	D0602054-005DL	Matrix:	Water
% Solids:		Initial Calib	ration ID	: 12/05/06MSM
Date Received: 12/13/06	Date Extracted:	Date Anal	lyzed: 12	2/14/06
Concentration Units (ug/L, or ug/K g dr	v weight) UG/L	Sample Volume	5 000	MI.

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	8.8	40	ND	40		D2
Tetrachloroethene	8.8	40	ND	40		D2
1,3-Dichloropropane	4.4	80	ND	40		D2
2-Hexanone	23	400	ND	40		D2
Dibromochloromethane	6.0	80	ND	40		D2
1,2-Dibromoethane	6.0	80	ND	40		D2
Chlorobenzene	6.0	40	ND	40		D2
1,1,1,2-Tetrachloroethane	9.2	200	ND	40		D2
Ethylbenzene	6.0	80	250	40		D2
Xylene (total)	5.6	400	120	40		D2E4
Styrene	6.4	80	ND	40		D2
Bromoform	7.2	200	ND	40		D2
Isopropylbenzene	6.8	80	42	40		D2E4
1,1,2,2-Tetrachloroethane	6.8	40	ND	40		D2
Bromobenzene	6.8	200	ND	40		D2
1,2,3-Trichloropropane	8.0	400	ND	40		D2
n-Propylbenzene	5.2	80	24	40		D2E4
2-Chlorotoluene	6.4	200	ND	40		D2
1,3,5-Trimethylbenzene	6.0	80	9.5	40		D2E4
4-Chlorotoluene	6.4	200	ND	40		D2
tert-Butylbenzene	7.2	200	ND	40		D2
1,2,4-Trimethylbenzene	5.2	80	21	40		D2E4
sec-Butylbenzene	6.8	200	ND	40		D2
1,3-Dichlorobenzene	4.4	40	ND	40		D2
p-Isopropyltoluene	4.0	80	ND	40		D2
1,4-Dichlorobenzene	4.4	40	ND	40		D2
n-Butylbenzene	13	200	ND	40		D2
1,2-Dichlorobenzene	5.6	40	ND	40		D2
1,2-Dibromo-3-chloropropane	32	200	ND	40		D2
1,2,4-Trichlorobenzene	14	200	ND	40		D2
Hexachlorobutadiene	24	40	ND	40		D2
Naphthalene	12	80	83	40		D2
1,2,3-Trichlorobenzene	15	200	ND	40		D2

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260				AAB #:D	0602054	
Lab Name: Columbia Analyti	cal Services/Redding	g				
Field Sample ID: ASE-39A-6	D2DL	Lab Sample ID: D	0602054-005DL	Matrix: _W	/ater	
% Solids:			Initial Calib	ration ID: _	12/05/06M	SM
Date Received: 12/13/06	Date Extra	cted:	Date Anal	yzed: <u>12/1</u>	4/06	
Concentration Units (ug/L or ug						
Analyte	M	DL RL	Concentration	Dilution	Confirm	Qualifier
			-	***************************************		
				:		
		7			<u> </u>	
	rogate	Recovery	Control Limits	S Qua	lifier	
4-Bromofluorob Dibromofluoron		99	82-124 84-127			
Toluene-d8 - SS		100	80-117			
	Intern	al Standard	Qualifier			
	Fluorobenzene	ar Stantar u	Quantier			
	Chlorobenzene-d5					
	1,4-Dichlorobenze	ne-d4				
			Surrogate Recove			
Comments:			Internal Stand	ards are repor	ted in Append	ix O-C

Analytical Method: SW8260	<del> </del>		AAB #: <u>D0602054</u>
Lab Name: Columbia Analytical Service	es/Redding		
Field Sample ID: ASE-38A-6D2	Lab Sample ID:	D0602054-006	Matrix: Water
% Solids:		Initial Calibr	ration ID: 12/05/06MSM
Date Received: 12/13/06	Date Extracted:	Date Analy	yzed: 12/14/06
Concentration Units (ug/L or ug/Kg dry w	reight): <u>UG/L</u>	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.70	1		E4
Acetone	1.0	20	1.9	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	70	1		
1,1-Dichloroethane	0.12	2.0	0.78	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		***************************************
cis-1,2-Dichloroethene	0.17	2.0	1.4	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.26	* 1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	240	Ι		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	3.6	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.41	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appenatx O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260			AAB #: <u>D0602054</u>	
Lab Name: Columbia Analytical Serv	ices/Redding			
Field Sample ID: ASE-38A-6D2	Lab Sample ID:	D0602054-006	Matrix: Water	
% Solids:		Initial Calib	oration ID: <u>12/05/06MSM</u>	
Date Received: 12/13/06	Date Extracted:	Date Anal	lyzed: 12/14/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1.		
Tetrachloroethene	0.22	1.0	1.4	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	110	1	·	
Xylene (total)	0.14	10	52	1		
Styrene	0.16	2.0	ND	1	, kr = 4	
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	22	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	. 1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	18	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	2.9	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.44	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	22	1		
sec-Butylbenzene	0.17	5.0	2.6	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	1.2	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	59	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260							AAB #:D	0602054	<u> </u>
Lab Name:	Columbia Analyti	ical Services/R	edding							
Field Sample	ID: <u>ASE-38A-6</u>	6D2	)	Lab Sa	ample ID: [	0602	054-006	Matrix: _V	Vater	
% Solids:							Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: <u>12/13/06</u>	Date	Extract	ted: _	·		Date Anal	yzed: <u>12/1</u>	4/06	
Concentration	n Units (ug/L or ug	g/Kg dry weigh	nt): <u> </u>	JG/L		San	nple Volume:	5.000 M	<u>L</u>	
	Analyte		MD	)L	RL	С	oncentration	Dilution	Confirm	Qualifier
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	Sur	rogate		I	Recovery		Control Limit	s Qua	llifier	) H
	4-Bromofluorob			103			82-124			
	Dibromofluoron				97	-	84-127	•		
	Toluene-d8 - SS	5			99		80-117			
		Internal Star			ıdard		Qualifier			
		Fluorobenzene								
		Chlorobenzene-d5								
		1,4-Dichloro	benzen	e-d4						
							Surrogate Recov			
Comments:							Internal Stand	aras are repoi	чеа ın Append	ix O-C

Analytical Method: SW8260		AAB #:
Lab Name: Columbia Analytical Ser	vices/Redding	
Field Sample ID: ASE-38A-6D2DL	Lab Sample ID: 1	00602054-006DL Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/13/06	Date Extracted:	Date Analyzed: 12/14/06
Concentration Units (ug/L or ug/K g dry	weight): UG/I	Sample Volume: 5 000 MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	14	200	ND	40		D2
Chloromethane	9.2	200	ND	40	· .	D2
Vinyl chloride	8.8	40	ND	40		D2
Bromomethane	11	40	ND	40		D2
Chloroethane	8.0	200	ND	40		D2
Trichlorofluoromethane	5.6	200	ND	40		D2
1,1-Dichloroethene	7.6	80	ND	40		D2
Acetone	40	800	ND	40		D2
Carbon disulfide	4.4	200	ND	40		D2
Methylene chloride	6.0	200	ND	40		D2
Iodomethane	8.0	400	ND	40		D2
trans-1,2-Dichloroethene	6.4	80	ND	40		D2
Tert-butylmethylether	6.8	40	71	40		D2
1,1-Dichloroethane	4.8	80	ND	40		D2
Vinyl acetate	34	1000	ND	40		D2
2,2-Dichloropropane	13	80	ND	40		D2
cis-1,2-Dichloroethene	6.8	80	ND	40		D2
2-Butanone	36	400	ND	40		D2
Bromochloromethane	10	200	ND	40		D2
Chloroform	5.6	80	12	40		D2E4
1,1,1-Trichloroethane	5.6	80	ND	40		D2
1,1-Dichloropropene	7.2	80	ND	40		D2
Carbon tetrachloride	7.2	80	ND	40		D2
Benzene	4.8	40	750	40		D2
1,2-Dichloroethane	7.2	40	ND	40		D2
Trichloroethene	4.0	40	ND	40		D2
1,2-Dichloropropane	6.8	80	ND	40		D2
Dibromomethane	7.2	80	ND	40		D2
Bromodichloromethane	6.8	40	ND	40		D2
cis-1,3-Dichloropropene	5.2	80	ND	40		D2
4-methyl-2-pentanone	34	400	ND	40		D2
Toluene	5.6	80	ND	40		D2
trans-1,3-Dichloropropene	7.6	80	ND	40		D2

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB #: <u>D0602054</u>
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-38A-6D2DL Lab Sample ID:	D0602054-006DL Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/13/06 Date Extracted:	Date Analyzed: 12/14/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	8.8	40	ND	40		D2
Tetrachloroethene	8.8	40	ND	40		D2
1,3-Dichloropropane	4.4	80	ND	40		D2
2-Hexanone	23	400	ND	40		D2
Dibromochloromethane	6.0	80	ND	40		D2
1,2-Dibromoethane	6.0	80	ND	40	-	D2
Chlorobenzene	6.0	40	ND	40		D2
1,1,1,2-Tetrachloroethane	9.2	200	ND	40		D2
Ethylbenzene	6.0	80	200	40		D2
Xylene (total)	5.6	400	54	40		D2E4
Styrene	6.4	80	ND	40		D2
Bromoform	7.2	200	ND	40		D2
Isopropylbenzene	6.8	80	23	40	·	D2E4
1,1,2,2-Tetrachloroethane	6.8	40	ND	40		D2
Bromobenzene	6.8	200	ND	40		D2
1,2,3-Trichloropropane	8.0	400	ND	40		D2
n-Propylbenzene	5.2	80	18	40		D2E4
2-Chlorotoluene	6.4	200	ND	40		D2
1,3,5-Trimethylbenzene	6.0	80	6.9	40		D2E4
4-Chlorotoluene	6.4	200	ND	40		D2
tert-Butylbenzene	7.2	200	ND	40		D2
1,2,4-Trimethylbenzene	5.2	80	25	40		D2E4
sec-Butylbenzene	6.8	200	ND	40		D2
1,3-Dichlorobenzene	4.4	40	ND	40		D2
p-Isopropyltoluene	4.0	80	ND	40		D2
1,4-Dichlorobenzene	4.4	40	ND	40		D2
n-Butylbenzene	13	200	ND	40		D2
1,2-Dichlorobenzene	5.6	40	ND	40		D2
1,2-Dibromo-3-chloropropane	32	200	ND	40		D2
1,2,4-Trichlorobenzene	14	200	ND	40		D2
Hexachlorobutadiene	24	40	ND	40		D2
Naphthalene	12	80	67	40		D2E4
1,2,3-Trichlorobenzene	15	200	ND	40		D2

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Me	ethod: SW8260	***************************************	-					AAB #:D	0602054	
Lab Name: _	Columbia Analyti	ical Services/	Redding							
Field Sample	ID: <u>ASE-38A-6</u>	5D2DL		Lab Sa	ample ID: D	0602	054-006DL	Matrix: _V	Vater	-
% Solids:							Initial Calib	ration ID: _	12/05/06M	SM
Date Received	d: <u>12/13/06</u>	Dat	e Extrac	ted: _			_ Date Anal	yzed: 12/1	4/06	·
Concentration	Units (ug/L or ug	g/Kg dry wei	ght): _U	JG/L		San	nple Volume:	5.000 M	<u>L</u>	
	Analyte		MI	)L	RL	C	oncentration	Dilution	Confirm	Qualifier
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• 1	Sur	rogate		I	Recovery	1	Control Limits	s Qua	lifier	
	4-Bromofluorob				103		82-124			
	Dibromofluoron				97		84-127			
	Toluene-d8 - SS	<u> </u>			101	-	80-117			
	<u> </u>									
			Interna	ıl Stan	dard	-	Qualifier	7		
		Fluorobenz	zene							
		Chlorobenz						_		
		1,4-Dichlo	robenzer	ne-d4			<u></u>			
							Surrogate Recove			
Comments:							Internal Stand	ards are repor	ted in Append	lix O-C
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Analytical Method: SW8260		AAB #: D0602054
Lab Name: Columbia Analytical Services/Reddin	ng	
Field Sample ID: PL-101A-6D2	Lab Sample ID: D0602054-007	Matrix: Water
% Solids:	Initial Calil	bration ID: 12/05/06MSM
Date Received: 12/13/06 Date Extra	acted: Date Ana	llyzed: 12/14/06
Concentration Units (ug/L or ug/Kg dry weight):	UG/L Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	.1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.56	1		E4
Acetone	1.0	20	2.1	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	18	1 .		
1,1-Dichloroethane	0.12	2.0	0.78	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	1.7	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	· ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	170	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.30	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.18	. 1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:		Internal Standards are reported in Appendix O-C
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Analytical Method: SW8260	<u> </u>	Α	AB #:
Lab Name: Columbia Analytical Se	rvices/Redding		
Field Sample ID: PL-101A-6D2	Lab Sample ID:	D0602054-007	Matrix: Water
% Solids:		Initial Calibra	tion ID: <u>12/05/06MSM</u>
Date Received: 12/13/06	Date Extracted:	Date Analyz	zed: <u>12/14/06</u>
Concentration Units (ug/L or ug/Kg da	ry weight): <u>UG/L</u>	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.28	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	110	1		
Xylene (total)	0.14	10	35	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	1.7	1		E4
Isopropylbenzene	0.17	2.0	53	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	I		
1,2,3-Trichloropropane	0.20	10	ND	1	-	
n-Propylbenzene	0.13	2.0	. 49	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	13	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	1.8	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	54	1		
sec-Butylbenzene	0.17	5.0	11	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	5.1	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	110	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

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Lab S	ample ID: D	0602054-007	Matrix: V	√ater	
		Initial Calib	ration ID: _	12/05/06M	SM
tracted:		Date Ana	lyzed: 12/1	4/06	
UG/L		Sample Volume:	5.000 M	<u>L</u>	
MDL	RL	Concentration	Dilution	Confirm	Qualifier
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	1				
	Recovery	Control Limit	s Qua	lifier	
	101	82-124			
	98	84-127			
	99	80-117			
rnal Sta	ndard	Qualifier			
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12c11c-u4					
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	MDL	racted:  UG/L  MDL RL  Recovery  101 98 99  Prnal Standard	Initial Calib tracted:	Initial Calibration ID: _ tracted:	Initial Calibration ID: 12/05/06M    tracted:

Analytical Method: SW8260	<del>100 (100 (100 (100 (100 (100 (100 (100 </del>	AAB #: <u>D0602054</u>
Lab Name: Columbia Analytical Se	ervices/Redding	
Field Sample ID: PL-101A-6D2DL	Lab Sample ID:	D0602054-007DL Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/13/06	Date Extracted:	Date Analyzed: 12/14/06
Concentration Units (ug/L or ug/V g d	by weight): LIG/I	Sample Volume: 5 000 MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	14	200	ND	40		D2
Chloromethane	9.2	200	ND	40		D2
Vinyl chloride	8.8	40	ND	40		D2
Bromomethane	11	40	ND	40		D2
Chloroethane	8.0	200	ND	40		D2
Trichlorofluoromethane	5.6	200	ND	40		D2
1,1-Dichloroethene	7.6	80	ND	40		D2
Acetone	40	800	ND	40		D2
Carbon disulfide	4.4	200	ND	40		D2
Methylene chloride	6.0	200	ND	40		D2
Iodomethane	8.0	400	ND	40		D2
trans-1,2-Dichloroethene	6.4	80	- ND	40		D2
Tert-butylmethylether	6.8	40	18	40		D2E4
1,1-Dichloroethane	4.8	80	ND	40		D2
Vinyl acetate	34	1000	ND	40		D2
2,2-Dichloropropane	13	80	ND	40		D2
cis-1,2-Dichloroethene	6.8	80	ND	40		D2
2-Butanone	36	400	ND	40		D2
Bromochloromethane	10	200	ND	40		D2
Chloroform	5.6	80	10	40		D2E4
1,1,1-Trichloroethane	5.6	80	ND	40		D2
1,1-Dichloropropene	7.2	80	ND	40		D2
Carbon tetrachloride	7.2	80	ND	40		D2
Benzene	4.8	40	230	40		D2
1,2-Dichloroethane	7.2	40	ND	40		D2
Trichloroethene	4.0	40	ND	40		D2
1,2-Dichloropropane	6.8	80	ND	40		D2
Dibromomethane	7.2	80	ND	40		D2
Bromodichloromethane	6.8	40	ND	40		D2
cis-1,3-Dichloropropene	5.2	80	ND	40		D2
4-methyl-2-pentanone	34	400	ND	40		D2
Toluene	5.6	80	ND	40		D2
trans-1,3-Dichloropropene	7.6	80	ND	40		D2

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	· .	AAB#	:D0602054
Lab Name: Columbia Analytical Service	ces/Redding		
Field Sample ID: PL-101A-6D2DL	Lab Sample ID:	D0602054-007DL Matrix	: Water
% Solids:		Initial Calibration I	D: <u>12/05/06MSM</u>
Date Received: 12/13/06	Date Extracted:	Date Analyzed: _	12/14/06
Concentration Units (ug/L or ug/K g dry y	veight): UG/I	Sample Volume: 5 000	) MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	8.8	40	ND	40		D2
Tetrachloroethene	8.8	40	ND	40		D2
1,3-Dichloropropane	4.4	80	ND	40		D2
2-Hexanone	23	400	ND	40	·	D2
Dibromochloromethane	6.0	80	ND	40		D2
1,2-Dibromoethane	6.0	80	ND	40		D2
Chlorobenzene	6.0	40	ND	40		D2
1,1,1,2-Tetrachloroethane	9.2	200	ND	40		D2
Ethylbenzene	6.0	80	200	40		D2
Xylene (total)	5.6	400	33	40		D2E4
Styrene	6.4	80	ND	40		D2
Bromoform	7.2	200	ND	40		D2
Isopropylbenzene	6.8	80	52	40		D2E4
1,1,2,2-Tetrachloroethane	6.8	40	ND	40		D2
Bromobenzene	6.8	200	ND	40		D2
1,2,3-Trichloropropane	8.0	400	ND	40		D2
n-Propylbenzene	5.2	80	45	40		D2E4
2-Chlorotoluene	6.4	200	ND	40		D2
1,3,5-Trimethylbenzene	6.0	80	13	40		D2E4
4-Chlorotoluene	6.4	200	· ND	40	/	D2
tert-Butylbenzene	7.2	200	ND	40		D2
1,2,4-Trimethylbenzene	5.2	80	53	40		D2E4
sec-Butylbenzene	6.8	200	10	40		D2E4
1,3-Dichlorobenzene	4.4	40	ND	40		D2
p-Isopropyltoluene	4.0	80	ND	40		D2
1,4-Dichlorobenzene	4.4	40	ND	40		D2
n-Butylbenzene	13	200	ND	40	1	D2
1,2-Dichlorobenzene	5.6	40	ND	40		D2
1,2-Dibromo-3-chloropropane	32	200	ND	40		D2
1,2,4-Trichlorobenzene	14	200	ND	40		D2
Hexachlorobutadiene	24	40	ND	40		D2
Naphthalene	12	80	160	40		D2
1,2,3-Trichlorobenzene	15	200	ND	40		D2

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Me	ethod: SW8260					A	AB#: D	0602054	
	Columbia Analyti	ical Services/Red	ding				-		
_	ID: PL-101A-6			ample ID: I	00602054-007	DL N	Matrix: W	/ater	
% Solids:								12/05/06M	SM
		Data Ex	etrocted:						5141
	d: 12/13/06								
Concentration	Units (ug/L or ug	g/Kg dry weight):	UG/L		Sample Vol	ume:	5.000 MI	<u> </u>	
	Analyte		MDL	RL	Concentra	ation	Dilution	Confirm	Qualifi
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			P. GITTER AND ADDRESS OF THE STATE OF THE ST						
	Sur	rogate		Recovery	Control	Limits	Qua	lifier	
	4-Bromofluorob			105	82-1				
	Dibromofluoron Toluene-d8 - SS			98 102	84-1				
	Tolucile-do - 55			102	80-1	1 /		· .	
		45kmaanuurururururururururururururururururur					<u> </u>		
			ernal Stai	ndard	Qua	lifier	4		
		Fluorobenzene Chlorobenzene	-d5	· · · · · · · · · · · · · · · · · · ·			1		
		1,4-Dichlorobe							
	1						,		
					Surrogate	e Recoveri	ies are repor	ted in Append	lix O-A
Comments:								ted in Append	

Analytical Method: SW8260			AAB #: D0602054
Lab Name: Columbia Analytical Ser	vices/Redding		
Field Sample ID: PL-508-6D2	Lab Sample ID:	D0602054-008	Matrix: Water
% Solids:		Initial Calibr	ration ID: 12/05/06MSM
Date Received: 12/13/06	Date Extracted:	Date Anal	yzed: <u>12/14/06</u>
Concentration Units (ug/L or ug/Kg dr	v weight): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.74	1		E4
Acetone	1.0	20	1.9	1		E4
Carbon disulfide	0.11	5.0	ND	11		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	72	11		
1,1-Dichloroethane	0.12	2.0	0.81	1		E4
Vinyl acetate	0.84	25	ND	. 1		
2,2-Dichloropropane	0.33	2.0	ND	. 1		
cis-1,2-Dichloroethene	0.17	2.0	1.5	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.25	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	240	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	3.5	1		
1,2-Dichloropropane	0.17	2.0	ND	1		***
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	11		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.40	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260		AAB #: <u>D0602054</u>	
Lab Name: Columbia Analytical Ser	rvices/Redding		
Field Sample ID: PL-508-6D2	Lab Sample ID:	D0602054-008 Matrix: Water	
% Solids:		Initial Calibration ID: 12/05/06MSM	-
Date Received: 12/13/06	Date Extracted:	Date Analyzed: 12/14/06	
Concentration Units (ug/L or ug/Kg da	ry weight): UG/L	Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	1.4	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	. 1		
Ethylbenzene	0.15	2.0	100	1		
Xylene (total)	0.14	10	53	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	23	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	18	1		
2-Chlorotoluene	0.16	5.0	ND	11	-	-
1,3,5-Trimethylbenzene	0.15	2.0	2.9	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.35	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	23	1		
sec-Butylbenzene	0.17	5.0	2.5	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	1.2	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	11		
n-Butylbenzene	0.33	5.0	ND	11		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	63	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Internal Standards are reported in Appendix O-C

Analytical Method: SW8260					AAB #:D	0602054	
Lab Name: Columbia Analyt	ical Services/Redding	<u></u>					
Field Sample ID: PL-508-6D	2	Lab Sa	mple ID: D	0602054-008	Matrix: _V	Vater	
% Solids:				Initial Calib	ration ID: _	12/05/06M	SM
Date Received: 12/13/06	Date Extrac	ted:		Date Anal	yzed: 12/1	4/06	
Concentration Units (ug/L or ug	g/Kg dry weight): _U	UG/L		Sample Volume:	5.000 M	<u>L</u>	
Analyte	MI	DL	RL	Concentration	Dilution	Confirm	Qualifie
				- Charles as PW			
		····					
ATTRI 07-17-04-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-							***************************************
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		***************************************					
Sur	rogate	F	Recovery	Control Limit	s Qua	lifier	
4-Bromofluorob			101	82-124			
Dibromofluoron Toluene-d8 - SS			97 98	84-127 80-117			
						-	
	Interna	l Stan	dard	Qualifier	7		
	Fluorobenzene						
	Chlorobenzene-d5						
	1,4-Dichlorobenzen	ne-d4	***************************************				
				Common and a Reserve			
Comments:				Surrogate Recove Internal Stand			
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Analytical Method: SW8260		AAB #:	D0602054
Lab Name: Columbia Analytical Se	ervices/Redding		
Field Sample ID: PL-508-6D2DL	Lab Sample ID:	D0602054-008DL Matrix:	Water
% Solids:		Initial Calibration II	D: <u>12/05/06MSM</u>
Date Received: 12/13/06	Date Extracted:	Date Analyzed: _1	2/14/06
Concentration Units (ug/L or ug/Kg d	lry weight): UG/L	Sample Volume: 5.000	ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	14	200	ND	40		D2
Chloromethane	9.2	200	ND	40		D2
Vinyl chloride	8.8	. 40	ND	40		D2
Bromomethane	11	40	ND	40		D2
Chloroethane	8.0	200	ND	40		D2
Trichlorofluoromethane	5.6	200	ND	40		D2
1,1-Dichloroethene	7.6	80	ND	40		D2
Acetone	40	800	ND	40		D2
Carbon disulfide	4.4	200	ND	40		D2
Methylene chloride	6.0	200	ND	40		D2
Iodomethane	8.0	400	ND	40		D2
trans-1,2-Dichloroethene	6.4	80	ND	40		D2
Tert-butylmethylether	6.8	40	74	40		D2
1,1-Dichloroethane	4.8	80	ND	40		D2
Vinyl acetate	34	1000	ND	40		D2
2,2-Dichloropropane	13	80	ND	40		D2
cis-1,2-Dichloroethene	6.8	80	ND	40		D2
2-Butanone	36	400	ND	40		D2
Bromochloromethane	10	200	ND	40		D2
Chloroform	5.6	80	12	40		D2E4
1,1,1-Trichloroethane	5.6	80	ND	40		D2
1,1-Dichloropropene	7.2	80	ND	40		D2
Carbon tetrachloride	7.2	80	ND	40		D2
Benzene	4.8	40	750	40		D2
1,2-Dichloroethane	7.2	40	ND	40		D2
Trichloroethene	4.0	40	ND	40		D2
1,2-Dichloropropane	6.8	80	ND	40	-	D2
Dibromomethane	7.2	- 80	ND	40		D2
Bromodichloromethane	6.8	40	ND	40		D2
cis-1,3-Dichloropropene	5.2	80	ND	40		D2
4-methyl-2-pentanone	34	400	ND	40		D2
Toluene	5.6	80	ND	40		D2
trans-1,3-Dichloropropene	7.6	80	ND	40		D2

Commontes		coveries are reported in Appendix O-A andards are reported in Appendix O-C
Comments:	. Internas di	andaras are reported in Appendix O-C

Analytical Method: SW8260		AAB#:	D0602054
Lab Name: Columbia Analytical Ser	vices/Redding		
Field Sample ID: PL-508-6D2DL	Lab Sample ID:	D0602054-008DL Matrix:	Water
% Solids:		Initial Calibration ID	0: <u>12/05/06MSM</u>
Date Received: 12/13/06	Date Extracted:	Date Analyzed: 1	2/14/06
Concentration Units (ug/L or ug/Kg dr	y weight): <u>UG/L</u>	Sample Volume: 5.000	ML

Analyte	MDL	RL	Concentration	Dilution	Conf
1,1,2-Trichloroethane	8.8	40	ND	40	
Tetrachloroethene	8.8	40	ND	40	
1,3-Dichloropropane	4.4	80	ND	40	
2-Hexanone	23	400	ND	40	

1,1,2 11101101000110110	0.0	70	110	70	 172
Tetrachloroethene	8.8	40	ND	40	D2
1,3-Dichloropropane	4.4	80	ND	40	D2
2-Hexanone	23	400	ND	40	D2
Dibromochloromethane	6.0	80	ND	40	D2
1,2-Dibromoethane	6.0	80	ND	40	D2
Chlorobenzene	6.0	40	ND	40	D2
1,1,1,2-Tetrachloroethane	9.2	200	ND	40	D2
Ethylbenzene	6.0	80	200	40	D2
Xylene (total)	5.6	400	52	40	D2E4
Styrene	6.4	80	ND	40	D2
Bromoform	7.2	200	ND	40	D2
Isopropylbenzene	6.8	80	23	40	D2E4
1,1,2,2-Tetrachloroethane	6.8	40	ND	40	D2
Bromobenzene	6.8	200	ND	40	D2
1,2,3-Trichloropropane	8.0	400	ND	40	D2 .
n-Propylbenzene	5.2	80	18	40	D2E4
2-Chlorotoluene	6.4	200	ND	40	D2
1,3,5-Trimethylbenzene	6.0	80	6.9	40	D2E4
4-Chlorotoluene	6.4	200	ND	40	D2
tert-Butylbenzene	7.2	200	ND	40	D2
1,2,4-Trimethylbenzene	5.2	80	23	40	D2E4
sec-Butylbenzene	6.8	200	ND	40	D2
1,3-Dichlorobenzene	4.4	40	ND	40	D2
p-Isopropyltoluene	4.0	80	ND	40	D2
1,4-Dichlorobenzene	4.4	40	ND	40	D2
n-Butylbenzene	13	200	ND	40	D2
1,2-Dichlorobenzene	5.6	40	ND	40	D2
1,2-Dibromo-3-chloropropane	32	200	ND	40	D2
1,2,4-Trichlorobenzene	14	200	ND	40	 D2
Hexachlorobutadiene	24	40	ND	40	D2
Naphthalene	12	80	65	40	D2E4
1,2,3-Trichlorobenzene	15	200	ND	40	D2

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Qualifier D2

Analytical M	ethod: SW8260							AAB #:D	0602054	
Lab Name:	Columbia Analyti	ical Services/Re	edding							
Field Sample	ID: PL-508-6D	2DL		Lab Sa	ample ID: D	0602	2054-008DL	Matrix: W	/ater	
% Solids:							Initial Calib			SM
Date Receive	d: <u>12/13/06</u>	Date 1	Extrac	ted:			Date Anal	yzed: 12/1	4/06	
	n Units (ug/L or ug						nple Volume:			
	Analyte		MI	)L	RL	C	oncentration	Dilution	Confirm	Qualifie
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	Sur	rogate		F	Recovery	T	Control Limits	s Qua	lifier	
	4-Bromofluorob				102		82-124			
	Dibromofluoron				98		84-127			
	Toluene-d8 - SS	) 			101	80-11				
	<u> </u>						· · · · · · · · · · · · · · · · · · ·			
		I	nterna	l Stan	dard		Qualifier			
		Fluorobenzer	ne							
		Chlorobenzer								
		1,4-Dichlorol	benzen	e-d4	·					
							Surrogate Recove			
Comments:							Internal Stand	ards are repor	ted in Append	ix O-C

Analytical Method: SW8260		AAB #: D0602054	_
Lab Name: Columbia Analytical Serv	vices/Redding		
Field Sample ID: ASE-57A-6D2	Lab Sample ID:	D0602054-009 Matrix: Water	
% Solids:		Initial Calibration ID: 12/05/06MSM	
Date Received: 12/13/06	Date Extracted:	Date Analyzed: 12/14/06	
Concentration Units (ug/L or ug/Kg dry	y weight): UG/L	Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		-
Chloromethane	0.23	5.0	1.0	1		E4
Vinyl chloride	0.22	1.0	15	1		
Bromomethane	0.27	1.0	. ND	1		
Chloroethane	0.20	5.0	21	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	2.9	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	91	1		
1,1-Dichloroethane	0.12	2.0	25	. 1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.86	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	260	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.20	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	1.1	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-A

Analytical Method: SW8260		A	AB #:_	D0602054
Lab Name: Columbia Analytical Se	ervices/Redding			
Field Sample ID: ASE-57A-6D2	Lab Sample ID	: D0602054-009 M	latrix:	Water
% Solids:		Initial Calibrat	ion ID	: 12/05/06MSM
Date Received: 12/13/06	Date Extracted:	Date Analyz	ed: <u>12</u>	2/14/06
Concentration Units (ug/L or ug/K g d	ry weight): LIG/I	Sample Volume	5,000	MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.38	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1 .	·	
Chlorobenzene	0.15	1.0	ND	1		1 .
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	60	1 .		
Xylene (total)	0.14	10	8.2	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	58	1		,
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1 .		
n-Propylbenzene	0.13	2.0	78	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	4.9	1		
4-Chlorotoluene	0.16	5.0	ND	1		1
tert-Butylbenzene	0.18	5.0	1.7	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	19	1		
sec-Butylbenzene	0.17	5.0	16	1		
1,3-Dichlorobenzene	0.11	1.0	ND	11		
p-Isopropyltoluene	0.10	2.0	5.6	11		
1,4-Dichlorobenzene	0.11	1.0	0.12	1		E4
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	0.16	1	·	E4
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	160	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:		Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
	-	

Analytical Me		AAB #: <u>D0602054</u>								
Lab Name:	Columbia Analyti	ical Services/I	Redding							
Field Sample ID: ASE-57A-6D2				Lab Sa	Sample ID: D0602054-009 Mat				Vater	
% Solids:					Initial Calibration ID: 12/05/06MSM					
Date Received: 12/13/06 Date Extracted:					Date Analyzed: 12/14/06					
	uunits (ug/L or ug						nple Volume:	5.000 M	<u>L</u>	
	Analyte N			L	RL	C	oncentration	Dilution	Confirm	Qualifier
					:					
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									·	
	Surrogate			Recovery			Control Limits		lifier	
	4-Bromofluorobenzene - SS			102			82-124			
	Dibromofluoromethane - SS			93			84-127			
	Toluene-d8 - SS			92			80-117			
		Internal St				ndard Qualifi				
		Fluorobenzene								
		Chlorobenz								
	I,4-Dichlorobenzene-d4									
Comments:							Surrogate Recov Internal Stand			
		<u> </u>								<del> </del>

## ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260		AAB #: <u>D0602054</u>			
Lab Name: Columbia Analytical Ser	Solids: Initial Calibration ID: _12/05/06MSM				
Field Sample ID: ASE-57A-6D2DL	Lab Sample ID:	D0602054-009DL Matrix: Water			
% Solids:		Initial Calibration ID: 12/05/06MSM			
Date Received: 12/13/06	Date Extracted:	Date Analyzed: 12/14/06			
Concentration Units (ug/L or ug/Kg dr	www.ight): UG/I	Sample Volume: 5 000 MI			

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	3.6	50	ND	10		D2
Chloromethane	2.3	50	ND	10		D2
Vinyl chloride	2.2	. 10	16	10		D2
Bromomethane	2.7	10	ND	10		D2
Chloroethane	2.0	50	22	10		D2E4
Trichlorofluoromethane	1.4	50	ND	10		D2
1,1-Dichloroethene	1.9	20	ND	10		D2
Acetone	10	200	ND	10		D2
Carbon disulfide	1.1	50	ND	10		D2
Methylene chloride	1.5	50	ND	10		D2
Iodomethane	2.0	100	ND	10		D2
trans-1,2-Dichloroethene	1.6	20	ND	10		D2
Tert-butylmethylether	1.7	10	88	10		D2
1,1-Dichloroethane	1.2	20	23	10		D2
Vinyl acetate	8.4	250	ND	10		D2
2,2-Dichloropropane	3.3	20	ND	10		D2
cis-1,2-Dichloroethene	1.7	20	ND	10		D2
2-Butanone	9.0	100	ND	10		D2
Bromochloromethane	2.5	50	ND	10		D2
Chloroform	1.4	20	3.0	10		D2E4
1,1,1-Trichloroethane	1.4	20	ND	10		D2
1,1-Dichloropropene	1.8	20	ND	10		D2
Carbon tetrachloride	1.8	20	ND	10		D2
Benzene	1.2	10	670	10		D2
1,2-Dichloroethane	1.8	10	ND	10		D2
Trichloroethene	1.0	10	ND	10		D2
1,2-Dichloropropane	1.7	20	ND	10		D2
Dibromomethane	1.8	20	ND	10		D2
Bromodichloromethane	1.7	10	ND	10		D2
cis-1,3-Dichloropropene	1.3	20	ND	10		D2
4-methyl-2-pentanone	8.5	100	ND	10		D2
Toluene	1.4	20	ND	10		D2
trans-1,3-Dichloropropene	1.9	20	ND	10		D2

Comments:	Internal Standards are reported in Appendix O-C

# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260	-		AAB #: <u>D060</u>	)2054
Lab Name: Columbia Analytical Ser	rvices/Redding			
Field Sample ID: <u>ASE-57A-6D2DL</u>	Lab Sample ID:	D0602054-009DL	Matrix: Wate	er
% Solids:		Initial Calib	oration ID: 12/	05/06MSM
Date Received: 12/13/06	Date Extracted:	Date Ana	lyzed: 12/14/0	6
Concentration Units (ug/L or ug/Kg dr	ry weight): IIG/I	Sample Volume	5 000 MI	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	2.2	10	ND	10		D2
Tetrachloroethene	2.2	10	ND	. 10		D2 .
1,3-Dichloropropane	1.1	20	ND	10		D2
2-Hexanone	5.8	100	ND	10		D2
Dibromochloromethane	1.5	20	ND	10		D2
1,2-Dibromoethane	1.5	20	ND	10		D2
Chlorobenzene	1.5	10	ND	10		D2
1,1,1,2-Tetrachloroethane	2.3	50	ND	10		D2
Ethylbenzene	1.5	20	62	10		D2
Xylene (total)	1.4	100	7.9	10		D2E4
Styrene	1.6	20	ND	10		D2
Bromoform	1.8	50	ND	. 10		D2
Isopropylbenzene	1.7	20	64	10		D2
1,1,2,2-Tetrachloroethane	1.7	10	ND	10		D2
Bromobenzene	1.7	50	2.3	10		D2E4
1,2,3-Trichloropropane	2.0	100	ND	10		D2
n-Propylbenzene	1.3	20	74	10		D2
2-Chlorotoluene	1.6	50	ND	10		D2
1,3,5-Trimethylbenzene	1.5	20	4.7	10		D2E4
4-Chlorotoluene	1.6	50	ND	10		D2
tert-Butylbenzene	1.8	50	1.9	10		D2E4
1,2,4-Trimethylbenzene	1.3	20	18	10		D2E4
sec-Butylbenzene	1.7	50	17	10		D2E4
1,3-Dichlorobenzene	1.1	10	ND	10		D2
p-Isopropyltoluene	1.0	20	5.7	10		D2E4
1,4-Dichlorobenzene	1.1	10	ND	10		D2
n-Butylbenzene	3.3	50	ND	10		D2
1,2-Dichlorobenzene	1.4	10	ND	10		D2
1,2-Dibromo-3-chloropropane	8.1	50	ND	10		D2
1,2,4-Trichlorobenzene	3.6	50	ND	10		D2
Hexachlorobutadiene	6.0	10	ND	10		D2
Naphthalene	2.9	20	470	10		D2
1,2,3-Trichlorobenzene	3.7	50	ND	10		D2

Comments:	Internal Standards are reported in Appendix O-C

# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Me	ethod: <u>SW8260</u>						AAB #:D	0602054	
Lab Name:	Columbia Analyti	cal Services/Redding							
Field Sample	ID: <u>ASE-57A-6</u>	D2DL	Lab Sa	ample ID: D(	602	054-009DL	Matrix: _V	Vater	
% Solids:						Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: 12/13/06	Date Extrac	ted:			Date Anal	yzed: 12/1	4/06	
		/Kg dry weight): _U							
	Analyte	MI	<u></u>	RL	C	oncentration	Dilution	Confirm	Qualifier
	Analyte		<i>,</i> ,,,	KL .		oncenti ation	Dilution	Commin	Quanner
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		rogate	F	Recovery	<u> </u>	Control Limits	S Qua	lifier	
	4-Bromofluorob			98		82-124			
*	Dibromofluoron Toluene-d8 - SS			96 98		84-127 80-117			
	Totalene do BB					00 117			
	L		<u> </u>		L	T			
		Interna	l Stan	dard		Qualifier	_		
		Fluorobenzene Chlorobenzene-d5	<del></del>	· · · · · · · · · · · · · · · · · · ·			-		
		1,4-Dichlorobenzen	ne-d4				-		
		1, v Diemorocciizei	ic a i						
Comments						Surrogate Recove Internal Stand			
Comments:									_ ~
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# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260			AAB #: <u>D0602054</u>	
Lab Name: Columbia Analytical S	ervices/Redding			
Field Sample ID: ASE-56A-6D2	Lab Sample ID:	D0602054-010	Matrix: Water	
% Solids:		Initial Ca	libration ID: 12/05/06MSM	
Date Received: 12/13/06	Date Extracted:	Date A	nalyzed: 12/14/06	_
Concentration Units (ug/L or ug/K g	dry weight): LIG/I	Sample Volume	5 000 MI	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	19	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	11	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	2.6	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	23	1		
1,1-Dichloroethane	0.12	2.0	78	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.98	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		***************************************
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	230	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	2.4	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Internal Standards are reported in Appendix O-C

## ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260		A	AAB #: D0602054
Lab Name: Columbia Analytical Service	ces/Redding		
Field Sample ID: ASE-56A-6D2	Lab Sample ID:	D0602054-010 N	Matrix: Water
% Solids:		Initial Calibra	ation ID: <u>12/05/06MSM</u>
Date Received: 12/13/06	Date Extracted:	Date Analy	zed: 12/14/06
Concentration Units (ug/L or ug/Kg dry v	weight): <u>UG/L</u>	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	ND	I		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	95	1		
Xylene (total)	0.14	10	77	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND.	1		
Isopropylbenzene	0.17	2.0	55	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	66	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	19	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	1.9	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	82	1		
sec-Butylbenzene	0.17	5.0	9.8	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	8.6	1		
1,4-Dichlorobenzene	0.11	1.0	0.12	1		E4
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	140	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
Comments:	THE THAT STANDARD AT E TEPOTTER IN APPENDIX O-C.

# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical M	lethod: SW8260						AAB #:D	0602054	······································
Lab Name:	Columbia Analyti	ical Services/Reddi	ng						
Field Sample	EID: ASE-56A-6	5D2	Lab S	Sample I <u>D:</u>	00602	054-010	Matrix: _V	/ater	
% Solids:						Initial Calib	ration ID:	12/05/06M	SM
Date Receive	ed: 12/13/06	Date Extr	acted:		****	Date Anal	yzed: <u>12/1</u>	4/06	
Concentration	n Units (ug/L or ug	g/Kg dry weight):	UG/L		Sam	nple Volume:	5.000 MI	<del></del>	
	Analyte	1	MDL	RL	C	oncentration	Dilution	Confirm	Qualifie
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	4-Bromofluorob	rogate enzene - SS		Recovery 91		Control Limits 82-124	s Qua	lifier	
	Dibromofluoron	<del></del>		87		84-127			
	Toluene-d8 - SS			90		80-117			
		Inter	nal Sta	ndard		Qualifier			
		Fluorobenzene							
	·	Chlorobenzene-d5 1,4-Dichlorobenzene-d4							
		1,4-Diciliorobenz	zene-u4						
						Current Passe	auiaa aya yanas	stad in Annone	Jin O 1
Comments:						Surrogate Recove Internal Stand			
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# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260		AAB #:
Lab Name: Columbia Analytical	Services/Redding	
Field Sample ID: ASE-56A-6D2I	DL Lab Sample ID:	D0602054-010DL Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/13/06	Date Extracted:	Date Analyzed: 12/14/06
Concentration Units (ug/L or ug/V g	dry weight): UCA	Sample Volume: 5 000 MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	3.6	50	ND	10		D2
Chloromethane	2.3	50	ND	10		D2
Vinyl chloride	2.2	10	20	10		D2
Bromomethane	2.7	10	ND	10		D2
Chloroethane	2.0	50	15	10		D2E4
Trichlorofluoromethane	1.4	50	ND	10		D2
1,1-Dichloroethene	1.9	20	ND	10		D2
Acetone	10	200	ND	10		D2 .
Carbon disulfide	1.1	50	ND	10		D2
Methylene chloride	1.5	50	ND	10		D2
Iodomethane	2.0	100	ND	10		D2
trans-1,2-Dichloroethene	1.6	20	ND	10		D2
Tert-butylmethylether	1.7	10	24	10		D2
1,1-Dichloroethane	1.2	20	80	10		D2
Vinyl acetate	8.4	250	ND	10		D2
2,2-Dichloropropane	3.3	20	ND	10		D2 ·
cis-1,2-Dichloroethene	1.7	20	ND	10		D2
2-Butanone	9.0	100	ND	10		D2
Bromochloromethane	2.5	50	ND	10		D2
Chloroform	. 1.4	20	3.1	10		D2E4
I,1,1-Trichloroethane	1.4	20	ND	10		D2
1,1-Dichloropropene	1.8	20	ND	10		D2
Carbon tetrachloride	1.8	20	ND	10		D2
Benzene	1.2	10	530	10		D2
1,2-Dichloroethane	1.8	10	ND	10		D2
Trichloroethene	1.0	10	ND	10		D2
1,2-Dichloropropane	1.7	20	ND	10		D2
Dibromomethane	1.8	20	ND	10		D2
Bromodichloromethane	1.7	10	ND	10		D2
cis-1,3-Dichloropropene	1.3	20	ND	10		D2
4-methyl-2-pentanone	8.5	100	ND	10		D2
Toluene	1.4	20	2.5	10		D2E4
trans-1,3-Dichloropropene	1.9	20	ND	10		D2

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260	N-100-100-100-100-100-100-100-100-100-10	AAB #: <u>D00</u>	502054
Lab Name: Columbia Analytical Serv	ices/Redding		
Field Sample ID: ASE-56A-6D2DL	Lab Sample ID:	D0602054-010DL Matrix: Wa	ter
% Solids:		Initial Calibration ID: 12	2/05/06MSM
Date Received: 12/13/06	Date Extracted:	Date Analyzed: 12/14/	06
Concentration Units (ug/L or ug/Kg dry	weight): UG/I	Sample Volume: 5 000 MI	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	2.2	10	ND	10		D2
Tetrachloroethene	2.2	10	ND	10		D2
1,3-Dichloropropane	1.1	20	ND	10		D2
2-Hexanone	5.8	100	ND	10		D2
Dibromochloromethane	1.5	20	ND	- 10		D2
1,2-Dibromoethane	1.5	20	ND	10		. D2
Chlorobenzene	1.5	10	ND	10		D2
1,1,1,2-Tetrachloroethane	2.3	50	ND	10		D2
Ethylbenzene	1.5	20	140	10		D2
Xylene (total)	1.4	100	80	10		D2E4
Styrene	1.6	20	ND	10		D2
Bromoform	1.8	50	ND	10		D2
Isopropylbenzene	1.7	20	61	10		D2
1,1,2,2-Tetrachloroethane	1.7	10	ND	10		D2
Bromobenzene	1.7	50	ND	10		D2
1,2,3-Trichloropropane	2.0	100	ND	10		D2
n-Propylbenzene	1.3	20	69	10		D2
2-Chlorotoluene	1.6	50	ND	10		D2
1,3,5-Trimethylbenzene	1.5	20	20	10		D2
4-Chlorotoluene	1.6	50	ND	10		D2
tert-Butylbenzene	1.8	50	2.2	10		D2E4
1,2,4-Trimethylbenzene	1.3	20	110	10		D2
sec-Butylbenzene	1.7	50	10	10		D2E4
1,3-Dichlorobenzene	1.1	10	ND	10		D2
p-Isopropyltoluene	1.0	20	8.9	10		D2E4
1,4-Dichlorobenzene	1.1	10	ND	10		D2
n-Butylbenzene	3.3	50	ND	10		D2
1,2-Dichlorobenzene	1.4	10	ND	10		D2
1,2-Dibromo-3-chloropropane	8.1	50	ND	10		D2
1,2,4-Trichlorobenzene	3.6	50	ND	10		D2
Hexachlorobutadiene	6.0	10	ND	10		D2
Naphthalene	2.9	20	450	10		D2
1,2,3-Trichlorobenzene	3.7	50	ND	10		D2

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C

# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical M	ethod: SW8260	·					AAB #:D	0602054	
Lab Name:	Columbia Analyt	ical Services/Redo	ling						
Field Sample	ID: <u>ASE-56A-6</u>	5D2DL	Lab S	ample I <u>D:</u> I	00602	054-010DL	Matrix: _V	Vater	
% Solids:	-					Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: <u>12/13/06</u>	Date Ex	tracted:			Date Anal	yzed: <u>12/1</u>	4/06	
Concentration	n Units (ug/L or ug	g/Kg dry weight):	UG/L		San	nple Volume:	5.000 M	L	
	Analyte		MDL	RL	C	oncentration	Dilution	Confirm	Qualifier
								-	
					-				
	<u> </u>							·	·
							-		
			-						
								-	
		rogate		Recovery		Control Limit	S Qua	lifier	
	4-Bromofluorob Dibromofluoror			98 95		82-124 84-127			
	Toluene-d8 - SS			97		80-117			
		Inte	rnal Star	ndard	· ·	Qualifier			
		Fluorobenzene							
		Chlorobenzene-	···						
		1,4-Dichlorober	izene-04			<u> </u>			
						Comments Desert			:- Ò 4
Comments:						Surrogate Recove Internal Stand			
			<del></del>						<del></del>

# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260	· .		AAB #: <u>D0602054</u>
Lab Name: Columbia Analytical Serv	rices/Redding		
Field Sample ID: ASE-37A-6D2	Lab Sample ID:	D0602054-011	Matrix: Water
% Solids:		Initial Cali	bration ID: 12/05/06MSM
Date Received: 12/13/06	Date Extracted:	Date Ana	alyzed: 12/14/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1	-	
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	l		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.67	1		E4
Acetone	1.0	20	1.1	. 1		E4
Carbon disulfide	0.11	5.0	ND	1		-
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	38	1		
1,1-Dichloroethane	0.12	2.0	0.78	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	2.2	1		
2-Butanone	0.90	10	ND	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Bromochloromethane	0.25	5.0	ND	1		-
Chloroform	0.14	2.0	ND <sup>a</sup>	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND ND	1		
Benzene	0.12	1.0	68	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	3.8	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:		_	re reported in Appendix O-A re reported in Appendix O-C
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# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260	<u>.                                    </u>		AAB #: <u>D0602054</u>	<del></del>
Lab Name: Columbia Analytical Se	ervices/Redding			
Field Sample ID: <u>ASE-37A-6D2</u>	Lab Sample ID	: D0602054-011	Matrix: Water	
% Solids:		Initial Ca	alibration ID: <u>12/05/06MSN</u>	1
Date Received: 12/13/06	Date Extracted:	Date A	nalyzed: 12/14/06	_
Concentration Units (ug/L or ug/Kg d	lry weight): LIG/L	Sample Volum	e: 5 000 MI	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.56	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	. 1		
Ethylbenzene	0.15	2.0	25	1		
Xylene (total)	0.14	10	12	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	11	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	10	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	6.1	11		
4-Chlorotoluene	0.16	5.0	· ND	1		
tert-Butylbenzene	0.18	5.0	0.61	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	20	1		
sec-Butylbenzene	0.17	5.0	3.6	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	1.4	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	19	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Mo	ethod: SW8260							AAB #:D	0602054	
Lab Name:	Columbia Analyti	ical Services/	Redding							
_	ID: ASE-37A-6				ample ID:	D0602	054-011	Matrix: V	Vater	
% Solids:					· · · · · · · · · · · · · · · · · · ·		Initial Calib			
	d: <u>12/13/06</u>	Dat	e Extrac	ted:				· ·		
	Units (ug/L or ug									
Concentration	Omis (ug/L or ug		5111). <u> </u>	JU/12		_ 34111	ipic voidine.		<u>-</u>	
	Analyte		MI	)L	RL	C	oncentration	Dilution	Confirm	Qualifier
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	Sur	rogate		I	Recovery	(	Control Limit	s Qua	lifier	
	4-Bromofluorob				100		82-124			
	Dibromofluoron				98 97		84-127			
	Toluene-d8 - SS	)	·····	:	97		80-117			
									PARAMATAN CANADA CANADA CANADA CANADA CANADA CANADA CANADA CANADA CANADA CANADA CANADA CANADA CANADA CANADA CA	
			Interna	l Stan	idard		Qualifier			
		Fluorobenz Chlorobenz						_		
		1,4-Dichlor		ne-d4						
	İ		COLUMN TO THE PARTY OF THE PART			ETT-18-40	en karantara persembangan kerantara kerantara kerantara kerantara kerantara kerantara kerantara kerantara kera	wood f		
							Surrogate Recov	eries are repoi	ted in Appena	lix O-A
Comments:							Internal Stand			
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### ORGANIC ANALYSES DATA SHEET 6 BLANKS

Analytical Method: SW8260	AAB #: <u>D0602054</u>	
Lab Name: Columbia Analytical Services/Redding	·	
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1214W01	
Lab Sample ID: M1214W01		

Initial Calibration ID: 12/05/06MSM

Analyte	MDL	Method Blank	RL	Q
Dichlorodifluoromethane	0.36	ND	5.0	
Chloromethane	0.23	ND	5.0	
Vinyl chloride	0.22	ND	1.0	
Bromomethane	0.27	ND	1.0	
Chloroethane	0.20	ND	5.0	
Trichlorofluoromethane	0.14	ND	5.0	
1,1-Dichloroethene	0.19	ND	2.0	,
Acetone	1.0	ND	20	
Carbon disulfide	0.11	ND	5.0	
Methylene chloride	0.15	ND	5.0	
Iodomethane	0.20	ND	10	
trans-1,2-Dichloroethene	0.16	ND	2.0	
Tert-butylmethylether	0.17	ND	1.0	-
1,1-Dichloroethane	0.12	ND	2.0	
Vinyl acetate	0.84	ND	25	
2,2-Dichloropropane	0.33	ND	2.0	
cis-1,2-Dichloroethene	0.17	ND	2.0	
2-Butanone	0.90	ND	10	
Bromochloromethane	0.25	ND	5.0	
Chloroform	0.14	0.18	2.0	E4
1,1,1-Trichloroethane	0.14	ND	2.0	
1,1-Dichloropropene	0.18	ND	2.0	
Carbon tetrachloride	0.18	ND	2.0	
Benzene	0.12	ND	1.0	
1,2-Dichloroethane	0.18	ND	1.0	
Trichloroethene	0.10	ND	1.0	
1,2-Dichloropropane	0.17	ND	2.0	
Dibromomethane	0.18	ND	2.0	
Bromodichloromethane	0.17	ND	1.0	
cis-1,3-Dichloropropene	0.13	ND	2.0	
4-methyl-2-pentanone	0.85	ND	10	
Toluene	0.14	ND	2.0	
trans-1,3-Dichloropropene	0.19	ND	2.0	

Comments:			

# ORGANIC ANALYSES DATA SHEET 6 BLANKS

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	· · · · · · · · · · · · · · · · · · ·
Concentration Units (ug/L or mg/kg): UG/L	Method Blank 1D: M1214W01
Lab Sample ID: M1214W01	

Initial Calibration ID: 12/05/06MSM

Analyte	MDL	Method Blank	RL	Q
1,1,2-Trichloroethane	0.22	ND	1.0	
Tetrachloroethene	0.22	ND	1.0	
1,3-Dichloropropane	0.11	ND	2.0	
2-Hexanone	0.58	ND	10	
Dibromochloromethane	0.15	ND	2.0	
1,2-Dibromoethane	0.15	ND	2.0	
Chlorobenzene	0.15	ND	1.0	
1,1,1,2-Tetrachloroethane	0.23	ND	5.0	'
Ethylbenzene	0.15	ND	2.0	
Xylene (total)	0.14	ND	10	
Styrene	0.16	ND	2.0	
Bromoform	0.18	ND	5.0	
Isopropylbenzene	0.17	ND	2.0	
1,1,2,2-Tetrachloroethane	0.17	ND	1.0	
Bromobenzene	0.17	ND	5.0	
1,2,3-Trichloropropane	0.20	ND	10	
n-Propylbenzene	0.13	ND	2.0	
2-Chlorotoluene	0.16	ND	5.0	
1,3,5-Trimethylbenzene	0.15	ND	2.0	
4-Chlorotoluene	0.16	ND	5.0	
tert-Butylbenzene	0.18	ND	5.0	
1,2,4-Trimethylbenzene	0.13	ND	2.0	
sec-Butylbenzene	0.17	ND	5.0	
1,3-Dichlorobenzene	0.11	ND	1.0	
p-Isopropyltoluene	0.10	ND	2.0	
1,4-Dichlorobenzene	0.11	ND	1.0	
n-Butylbenzene	0.33	ND	5.0	
1,2-Dichlorobenzene	0.14	ND	1.0	
1,2-Dibromo-3-chloropropane	0.81	ND	5.0	
1,2,4-Trichlorobenzene	0.36	ND	5.0	
Hexachlorobutadiene	0.60	ND	1.0	
Naphthalene	0.29	ND	2.0	
1,2,3-Trichlorobenzene	0.37	ND	5.0	1

Comments:		

### ORGANIC ANALYSES DATA SHEET 6 BLANKS

Analytic	cal N	Method: SW8260		AAB #: _	D060	2054	·········	
Lab Name: Columbia Analytical Services/Redding								
Concentration Units (ug/L or mg/kg): UG/L Method Blank ID: M1214W01								
Lab San	nple	ID: <u>M1214W01</u>						
Initial C	alib	ration ID: <u>12/05/</u>	06MSM					
		Anal	lyte	MDL	Me	thod Blank	RL	Q
-								
-								
-								
			-					
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	·							
			rogate	Recovery		Control Limits	Qualifie	r
		4-Bromofluorob Dibromofluoron		101		82-124		
		Toluene-d8 - SS		99 100	84-127 80-117			
						30 117		
	,		¥ 1.	164 3 3		0 1:5	1	
			Internal Standard Qualifier Fluorobenzene					
			Chlorobenzene-d5				_	
	1,4-Dichlorobenzene-d4							
							anced .	
Comme	nts:							

Analytical Method: SW8260	AAB #: <u>D0602054</u>	
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1214W01LCS	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/14/06	

Initial Calibration ID: <u>12/05/06MSM</u>

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	12.4	124	27-158	
Chloromethane	10.0	11.0	110	51-137	
Vinyl chloride	10.0	10.9	109	57-137	
Bromomethane	10.0	11.4	114	44-156	
Chloroethane	10.0	11.0	110	60-140	
Trichlorofluoromethane	10.0	12.2	122	54-146	
1,1-Dichloroethene	10.0	10.9	109	70-130	
Acetone	50.0	48.4	97	55-137	
Carbon disulfide	10.0	9.9	99	50-127	
Methylene chloride	10.0	9.9	99	73-121	
Iodomethane	10.0	9.4	94	50-150	E4
trans-1,2-Dichloroethene	10.0	9.8	98	74-124	
Tert-butylmethylether	10.0	9.7	97	75-119	
1,1-Dichloroethane	10.0	9.7	97	78-121	
Vinyl acetate	10.0	10.8	108	52-129	E4
2,2-Dichloropropane	10.0	10.1	101	61-137	
cis-1,2-Dichloroethene	10.0	10.2	102	80-118	
2-Butanone	50.0	48.4	97	76-122	
Bromochloromethane	10.0	10.0	100	82-118	
Chloroform	10.0	9.9	99	73-125	
1,1,1-Trichloroethane	10.0	9.7	97	76-124	
1,1-Dichloropropene	10.0	10.0	100	80-119	
Carbon tetrachloride	10.0	10.1	101	68-135	
Benzene	10.0	10.0	100	81-119	
1,2-Dichloroethane	10.0	9.5	95	75-122	
Trichloroethene	10.0	9.9	99	79-118	
1,2-Dichloropropane	10.0	9.6	96	82-115	
Dibromomethane	10.0	9.8	98	84-116	
Bromodichloromethane	10.0	10.0	100	81-122	
cis-1,3-Dichloropropene	10.0	10.2	102	78-118	
4-methyl-2-pentanone	50.0	49.9	100	81-127	
Toluene	10.0	9.8	98	83-116	
trans-1,3-Dichloropropene	10.0	10.0	100	73-122	

Comments:	

Analytical Method: SW8260	AAB #: <u>D0602054</u>	
Lab Name: Columbia Analytical Serv	vices/Redding	
LCS ID: M1214W01LCS	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/14/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	9.8	98	83-120	
Tetrachloroethene	10.0	10.4	104	82-118	
1,3-Dichloropropane	10.0	9.9	99	82-119	
2-Hexanone	50.0	48.6	97	81-130	
Dibromochloromethane	10.0	10.2	102	79-124	
1,2-Dibromoethane	10.0	10.1	101	82-116	
Chlorobenzene	10.0	10.0	100	86-114	
1,1,1,2-Tetrachloroethane	10.0	9.8	98	79-122	
Ethylbenzene	10.0	10.4	104	86-116	
Xylene (total)	30.0	30.5	102	85-117	
Styrene	10.0	10.2	102	84-119	
Bromoform	10.0	9.5	95	71-133	
Isopropylbenzene	10.0	10.6	106	77-117	
1,1,2,2-Tetrachloroethane	10.0	9.6	96	80-117	
Bromobenzene	10.0	10.1	101	84-120	
1,2,3-Trichloropropane	10.0	9.9	99	81-122	E4
n-Propylbenzene	10.0	10.3	103	87-117	
2-Chlorotoluene	10.0	10.1	101	87-119	
1,3,5-Trimethylbenzene	10.0	10.2	102	83-120	
4-Chlorotoluene	10.0	10.1	101	86-118	
tert-Butylbenzene	10.0	8.9	89	82-122	
1,2,4-Trimethylbenzene	10.0	10.3	103	86-121	
sec-Butylbenzene	10.0	10.8	108	84-128	
1,3-Dichlorobenzene	10.0	10.0	100	85-119	
p-Isopropyltoluene	10.0	10.3	103	84-121	
1,4-Dichlorobenzene	10.0	9.9	99	84-118	
n-Butylbenzene	10.0	9.9	99	81-123	
1,2-Dichlorobenzene	10.0	10.2	102	85-117	
1,2-Dibromo-3-chloropropane	40.0	38.0	95	67-121	
1,2,4-Trichlorobenzene	10.0	9.9	99	69-128	
Hexachlorobutadiene	10.0	10.3	103	71-135	
Naphthalene	10.0	10.2	102	60-131	
1,2,3-Trichlorobenzene	10.0	9.8	98	69-130	

Comments:	

Analytica	l Method: SW820	50	AAE	3 #: _D0602	2054	<del></del>	
Lab Name	e: Columbia Ana	alytical Services/Red	ding				
LCS ID:	M1214W01LCS	Concer	ntration Units (	(ug/L or mg	/kg): <u>UG/L</u>		
Date Extra	acted:	Date Ana	alyzed: 12/14	/06			
Initial Cal	ibration ID: 12/0	5/06MSM					
	Analyte		Expected	Found	%R	Control Limits	Q
						· · · · · · · · · · · · · · · · · · ·	
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L			<u> </u>				
	Sur	rogate	Recover	y C	ontrol Limits	Qualifier	
	4-Bromofluorob		101		82-124		
	Dibromofluoron Toluene-d8 - SS		101 101	-	84-127 80-117		
		Interns	ıl Standard		Qualifier		
		Fluorobenzene	. Standard		Quanner	1	
		Chlorobenzene-d5					
		1,4-Dichlorobenzer	ne-d4				
0							
Comment	s:						VIAVAN
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Analytical Method: SW8260	AAB #: _D0602054		
Lab Name: Columbia Analytical	Services/Redding		
LCS ID: M1214W01LCSD	Concentration Units (ug/L or mg/kg):	UG/L	
Date Extracted:	Date Analyzed: 12/14/06		

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	11.5	115	27-158	
Chloromethane	10.0	10.1	101	51-137	
Vinyl chloride	10.0	10.5	105	57-137	
Bromomethane	10.0	10.9	109	44-156	
Chloroethane	10.0	10.9	109	60-140	
Trichlorofluoromethane	10.0	11.5	115	54-146	
1,1-Dichloroethene	10.0	10.7	107	70-130	
Acetone	50.0	46.5	93	55-137	
Carbon disulfide	10.0	9.5	95	50-127	-
Methylene chloride	10.0	9.9	99	73-121	
Iodomethane	10.0	9.4	94	50-150	E4
trans-1,2-Dichloroethene	10.0	9.6	96	74-124	
Tert-butylmethylether	10.0	9.7	97	75-119	
1,1-Dichloroethane	10.0	9.7	97	78-121	
Vinyl acetate	10.0	10.6	106	52-129	<b>E</b> 4
2,2-Dichloropropane	10.0	9.8	98	61-137	
cis-1,2-Dichloroethene	10.0	10.0	100	80-118	·
2-Butanone	50.0	48.4	97	76-122	-
Bromochloromethane	10.0	9.7	97	82-118	
Chloroform	10.0	9.7	97	73-125	
1,1,1-Trichloroethane	10.0	9.5	95	76-124	
1,1-Dichloropropene	10.0	9.9	99	80-119	
Carbon tetrachloride	10.0	9.8	98	68-135	
Benzene	10.0	10.1	101	81-119	
1,2-Dichloroethane	10.0	9.6	96	75-122	•
Trichloroethene	10.0	9.7	97	79-118	
1,2-Dichloropropane	10.0	9.6	96	82-115	
Dibromomethane	10.0	9.8	98	84-116	
Bromodichloromethane	10.0	9.8	98	81-122	
cis-1,3-Dichloropropene	10.0	9.9	99	78-118	
4-methyl-2-pentanone	50.0	49.7	99	81-127	
Toluene	10.0	9.8	98	83-116	
trans-1,3-Dichloropropene	10.0	9.8	98	73-122	

Comments:			
		•	

Analytical Method: SW8260	AAB #: <u>D0602054</u>	
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1214W01LCSD	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/14/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	9.7	97	83-120	
Tetrachloroethene	10.0	10.0	100	82-118	
1,3-Dichloropropane	10.0	9.8	98	82-119	
2-Hexanone	50.0	47.9	96	81-130	
Dibromochloromethane	10.0	10.0	100	79-124	
1,2-Dibromoethane	10.0	9.7	97	82-116	
Chlorobenzene	10.0	9.9	99	86-114	·
1,1,1,2-Tetrachloroethane	10.0	9.6	96	79-122	
Ethylbenzene	10.0	10.0	100	86-116	
Xylene (total)	30.0	30.0	100	85-117	
Styrene	10.0	10,1	101	84-119	
Bromoform	10.0	9.2	92	71-133	
Isopropylbenzene	10.0	10.3	103	77-117	
1,1,2,2-Tetrachloroethane	10.0	10.2	102	80-117	
Bromobenzene	10.0	10.2	102	84-120	
1,2,3-Trichloropropane	10.0	9.9	99	81-122	E4
n-Propylbenzene	10.0	10.2	102	87-117	
2-Chlorotoluene	10.0	10.2	102	87-119	
1,3,5-Trimethylbenzene	10.0	9.9	99	83-120	
4-Chlorotoluene	10.0	10.1	101	86-118	
tert-Butylbenzene	10.0	8.9	89	82-122	
1,2,4-Trimethylbenzene	10.0	10.3	103	86-121	
sec-Butylbenzene	10.0	10.7	107	84-128	
1,3-Dichlorobenzene	10.0	10.0	100	85-119	
p-Isopropyltoluene	10.0	10.2	102	84-121	
1,4-Dichlorobenzene	10.0	10.0	100	84-118	
n-Butylbenzene	10.0	9.7	97	81-123	
1,2-Dichlorobenzene	10.0	10.1	101	85-117	
1,2-Dibromo-3-chloropropane	40.0	37.6	94	67-121	-
1,2,4-Trichlorobenzene	10.0	9.9	99	69-128	
Hexachlorobutadiene	10.0	10.0	100	71-135	
Naphthalene	10.0	10.3	103	60-131	
1,2,3-Trichlorobenzene	10.0	10.1	101	69-130	

Comments:			

Analytica	l Method: SW82	60	AAE	8 #: <u>D06</u>	02054		
Lab Name	e: <u>Columbia An</u>	alytical Services/Red	ding				
LCS ID:	M1214W01LCSI	Concer	ntration Units (	(ug/L or n	ng/kg): <u>UG/L</u>		
Date Extr	acted:	Date An	alyzed: 12/14	/06			
	libration ID: 12/0						
	Analyte	*	Expected	Found	%R	Control Limits	Q
	Allalytt		Expected	Tound	7013	Control Limits	
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	Sur	rogate	Recover	y	Control Limits	Qualifier	
	4-Bromofluorob		101		82-124		
	Dibromofluoron Toluene-d8 - SS		100		84-127 80-117		
	Toldene-do - SS				00-117		
		T	-1.04- 1			T	
		Fluorobenzene	al Standard		Qualifier		
		Chlorobenzene-d5					
		1,4-Dichlorobenzei	ne-d4	***************************************			
Comment	S:						
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# ORGANIC ANALYSES DATA SHEET 7 LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE

Analytical Method: SW8260	1	AAB #: <u>D0602054</u>			
Lab Name: Columbia Analytical Services/Reddin	g				
Concentration Units (ug/L or mg/kg): UG/L		-	%Solids:	***************************************	
Parent Field Sample ID: M1214W01	BS ID:	M1214W01LCS	BSD ID:	MI214W01LCSD	

	Parent		Spiked		Duplicat					
Analyte	Sample	Spike	Sample	%R	Spike	%R	%RPD	Control	Control	Q
	Result	Added	Result		Sample			Limits	Limits	
·					Result			%RPD	%R	
Dichlorodifluoromethane		10.0	12.4	124	11.5	115	8	20	27-158	
Chloromethane		10.0	11.0	110	10.1	101	8	20	51-137	
Vinyl chloride		10.0	10.9	109	10.5	105	4	20	57-137	:
Bromomethane		10.0	11.4	114	10.9	109	4	20	44-156	
Chloroethane		10.0	11.0	110	10.9	109	1	20	60-140	
Trichlorofluoromethane		10.0	12.2	122	11.5	115	6	20	54-146	
1,1-Dichloroethene		10.0	10.9	109	10.7	107	2	20	70-130	
Acetone		50.0	48.4	97	46.5	93	4	20	55-137	
Carbon disulfide		10.0	9.9	99	9.5	95	4	20	50-127	
Methylene chloride		10.0	9.9	99	9.9	99	0	20	73-121	
Iodomethane	-	10.0	9.4	94	9.4	94	0	20	50-150	E4
trans-1,2-Dichloroethene		10.0	9.8	98	9.6	96	2	20	74-124	
Tert-butylmethylether		10.0	9.7	97	9.7	97	0	20	75-119	
1,1-Dichloroethane		10.0	9.7	97	9.7	97	0	20	78-121	
Vinyl acetate		10.0	10.8	108	10.6	106	2	20	52-129	E4
2,2-Dichloropropane		10.0	10.1	101	9.8	98	3	20	61-137	
cis-1,2-DichIoroethene		10.0	10.2	102	10.0	100	2	20	80-118	
2-Butanone		50.0	48.4	97	48.4	97	0	20	76-122	
Bromochloromethane		10.0	10.0	100	9.7	97	3	20	82-118	
Chloroform		10.0	9.9	99	9.7	97	2	20	73-125	
1,1,1-Trichloroethane		10.0	9.7	97	9.5	95	2	20	76-124	
1,1-Dichloropropene		10.0	10.0	100	9.9	99	1	20	80-119	
Carbon tetrachloride		10.0	10.1	101	9.8	98	3	20	68-135	
Benzene		10.0	10.0	100	10.1	101	1	20	81-119	
1,2-Dichloroethane		10.0	9.5	95	9.6	96	1	20	75-122	
Trichloroethene		10.0	9.9	99	9.7	97	2	20	79-118	

Comments:		

# ORGANIC ANALYSES DATA SHEET 7 LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE

Analytical Method: SW8260	AAB #: <u>D0602054</u>
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	%Solids:
Parent Field Sample ID: M1214W01 BS II	D: M1214W01LCS BSD ID: M1214W01LCSD

	Parent	Cil-a	Spiked	%R	Duplicat	%R	%RPD	Control	Control	0
Analyte	Sample	Spike Added	Sample	%0K	Spike	70K	%KPD	Limits	Control Limits	Q
	Result	Added	Result		Sample			%RPD	%R	
					Result			%KPD	70K	
1,2-Dichloropropane		10.0	9.6	96	9.6	96	0	20	82-115	
Dibromomethane		10.0	9.8	98	9.8	98	0	20	84-116	
Bromodichloromethane		10.0	10.0	100	. 9.8	98	2	20	81-122	
cis-1,3-Dichloropropene		10.0	10.2	102	9.9	99	3	20	78-118	
4-methyl-2-pentanone		50.0	49.9	100	49.7	99	0	20	81-127	
Toluene		10.0	9.8	98	9.8	98	0	20	83-116	
trans-1,3-Dichloropropene		10.0	10.0	100	9.8	98	2	20	73-122	
1,1,2-Trichloroethane		10.0	9.8	98	9.7	97	1	20	83-120	
Tetrachloroethene		10.0	10.4	104	10.0	100	4	20	82-118	
1,3-Dichloropropane		10.0	9.9	99	9.8	98	1	20	82-119	
2-Hexanone		50.0	48.6	97	47.9	96	1	20	81-130	
Dibromochloromethane		10.0	10.2	102	10.0	100	2	20	79-124	
1,2-Dibromoethane		10.0	10.1	101	9.7	97	4	. 20	82-116	
Chlorobenzene		10.0	10.0	100	9.9	. 99	1	20	86-114	
1,1,1,2-Tetrachloroethane		10.0	9.8	98	9.6	96	2	20	79-122	
Ethylbenzene		10.0	10.4	104	10.0	100	4	20	86-116	
Xylene (total)		30.0	30.5	102	30.0	100	2	20	85-117	
Styrene		10.0	10.2	102	10.1	101	1	20	84-119	
Bromoform		10.0	9.5	95	9.2	92	3	20	71-133	
lsopropylbenzene		10.0	10.6	106	10.3	103	3	20	77-117	
1,1,2,2-Tetrachloroethane		10.0	9.6	96	10.2	102	6	20	80-117	
Bromobenzene		10.0	10.1	101	10.2	102	1	20	84-120	
1,2,3-Trichloropropane		10.0	9.9	99	9.9	99	0	20	81-122	E4
n-Propylbenzene		10.0	10.3	103	10.2	102	1	20	87-117	
2-Chlorotoluene		10.0	10.1	101	10.2	102	1	20	87-119	
1,3,5-Trimethylbenzene		10.0	10.2	102	9.9	99	3	20	83-120	

Comments:	

# ORGANIC ANALYSES DATA SHEET 7 LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE

Analytical Method: SW826	0	<del></del>	· . · · ·	AAB#:	D0602054	4				
Lab Name: Columbia Ana	lytical Serv	vices/Redd	ling							
Concentration Units (ug/L or	mg/kg):	UG/L		-		%Soli	ds:			
Parent Field Sample ID: M1	214W01		BS ID:	M1214	W01LCS		BSD II	D: <u>M121</u> 4	W01LCSI	)
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
-Chlorotoluene		10.0	10.1	101	10.1	101	0	20	86-118	
rt-Butylbenzene		10.0	8.9	89	8.9	89	0	20	82-122	
,2,4-Trimethylbenzene		10.0	10.3	103	10.3	103	0	20	86-121	
ec-Butylbenzene		10.0	10.8	108	10.7	107	1	20	84-128	
3-Dichlorobenzene		10.0	10.0	100	10.0	100	0	20	85-119	
-Isopropyltoluene		10.0	. 10.3	103	10.2	102	1	20	84-121	
,4-Dichlorobenzene		10.0	9.9	99	10.0	100	1	20	84-118	
Butylbenzene		10.0	9.9	99	9.7	97	2	20	81-123	
,2-Dichlorobenzene		10.0	10.2	102	10.1	101	. 1	20	85-117	
,2-Dibromo-3-chloropropane		40.0	38.0	95	37.6	94	1	20	67-121	
,2,4-Trichlorobenzene		10.0	9.9	99	9.9	99	0	20	69-128	
lexachlorobutadiene		10.0	10.3	103	10.0	100	3	20	71-135	
aphthalene		10.0	10.2	102	10.3	103	1	20	60-131	
,2,3-Trichlorobenzene		10.0	9.8	98	10.1	101	3	20	69-130	
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Comments:				-						

# ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: SW8260	AAB#:	D0602054	
Lab Name: Columbia Analytical Services/Redding			
Instrument ID #: MSM DB-624			

Field Sample ID/Std ID/	Laboratory	Date Analysis	Time Analysis	Date Analysis	Time Analysis
Blank ID/QC Sample ID	File ID	Started	Started	Completed	Completed
VSTD00.5	M065370	12/05/06	1545	12/05/06	1605
VSTD001	M065371	12/05/06	1606	12/05/06	1626
VSTD005	M065372	12/05/06	1628	12/05/06	1648
VSTD010	M065373	12/05/06	1649	12/05/06	1709
VSTD020	M065374	12/05/06	1711	12/05/06	1731
VSTD050	M065375	12/05/06	1732	12/05/06	1752
VSTD100	M065376	12/05/06	1754	12/05/06	1814
VSTD150	M065377	12/05/06	1815	12/05/06	1835
QCALTSTD4	M065380	12/05/06	1920	12/05/06	1940
VSTD10M	M065525	12/14/06	1049	12/14/06	1109
M1214W01LCS	M065526A	12/14/06	1111	12/14/06	1131
M1214W01LCSD	M065527A	12/14/06	1132	12/14/06	1152
M1214W01	M065530A	12/14/06	1238	12/14/06	1258
TB-121206	M065536	12/14/06	1447	12/14/06	1507
ASE-64A-6D2	M065537	12/14/06	1508	12/14/06	1528
ASE-63A-6D2	M065538	12/14/06	1530	12/14/06	1550
ASE-39A-6D2	M065539	12/14/06	1551	12/14/06	1611
ASE-38A-6D2	M065540	. 12/14/06	1613	12/14/06	1633
PL-101A-6D2	M065541	12/14/06	1634	12/14/06	1654
PL-508-6D2	M065542	12/14/06	1655	12/14/06	1715
PL-506-6D2	M065543	12/14/06	1717	12/14/06	1737
PL-506-6D2DL	M065544	12/14/06	1738	12/14/06	1758
ASE-57A-6D2	M065545	12/14/06	1800	12/14/06	1820
ASE-57A-6D2DL	M065546	12/14/06	1821	12/14/06	1841
ASE-56A-6D2	M065547	12/14/06	1847	12/14/06	1907
ASE-56A-6D2DL	M065548	12/14/06	1908	12/14/06	1928

Comments:			
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# ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: SW8260	)	AAB #:	502054	· <del>-</del>	
Lab Name: Columbia Analyt	ical Services/Redding				
nstrument ID #: MSM I	DB-624				
Field Sample ID/Std ID/	Laboratory	Date Analysis	Time Analysis	Date Analysis	Time Analysis
Blank ID/QC Sample ID	File ID	Started	Started	Completed	Completed
ASE-63A-6D2DL	M065549	12/14/06	1930	12/14/06	1950
ASE-39A-6D2DL	M065550	12/14/06	1951	12/14/06	2011
ASE-38A-6D2DL	M065551	12/14/06	2013	12/14/06	2033
PL-101A-6D2DL	M065552	12/14/06	2034	12/14/06	2054
PL-508-6D2DL	M065553	12/14/06	2056	12/14/06	2116
ASE-37A-6D2	M065554	12/14/06	2117	12/14/06	2137
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Comments:					

## ORGANIC ANALYSES DATA SHEET APPENDIX A SURROGATE RESULTS

Analytical Method: SW8260			A.A	AB #: <u>D06</u>	602054					
Lab Name: Columbia Analy	tical Servic	ces/Reddir	ng							
Matrix: Water										
Field/QC Sample ID	S1	S2	S3 .	S4	<b>S</b> 5	S6	S7	S8	Q	
M1214W01LCS	101	101	101							
M1214W01LCSD	101	100	99							
M1214W01	101	99	100							
TB-121206	102	100	100							
ASE-64A-6D2	102	100	97			-				
ASE-63A-6D2	102	97	98							
ASE-39A-6D2	102	98	100							
ASE-38A-6D2	. 103	97	99							
PL-101A-6D2	101	98	99							
PL-508-6D2	101	97	98							
PL-506-6D2	101	98	98							
ASE-57A-6D2	102	93	92							
ASE-57A-6D2DL	98	96	98							
ASE-56A-6D2	91	87	90							
ASE-56A-6D2DL	98	95	97							
ASE-63A-6D2DL	101	98	99							
ASE-39A-6D2DL	99	101	100							
ASE-38A-6D2DL	103	97	101							
PL-101A-6D2DL	105	98	102							
PL-508-6D2DL	102	98	101			-				
ASE-37A-6D2	100	98	- 97							
								-		
S1: 4-Bromofluorobenzene S2: Dibromofluoromethan S3: Toluene-d8 - SS		84	-124 -127 -117							
Comments:										



December 29, 2006

Service Request No: D0602066

Shane Lowe CH2M Hill 2625 S. Plaza Drive Suite 300 Tempe, AZ 85282

RE: Sky Harbor/2959482

Dear Shane:

Enclosed are the results of the sample(s) submitted to our laboratory on December 14, 2006. For your reference, these analyses have been assigned our service request number D0602066.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 105. You may also contact me via email at MFesler@redding.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Mark Fesler

**Project Chemist** 

CC: Terri Krauss

Page 1 of SH

## **Current CAS Redding Accreditation Programs**

### Federal and National Programs

- U.S Air Force, Air Force Center for Environmental Excellence (AFCEE)
   Approved laboratory for Wastewater and Hazardous Waste
- U.S. Army Corps of Engineers MRD, HTRW Mandatory Center of Expertise Validated for Wastewater and Hazardous Waste
- Department of the Navy, Naval Facilities Engineering Service Center (NFESC)

  Approved laboratory for Wastewater and Hazardous Waste

### State and Local Programs

- State of Alaska, Department of Environmental Conservation Approved Laboratory for Contaminated Sites Lab ID UST-001
- State of Arizona, Department of Health Services, Office of Laboratory Licensure
   Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste
   Lab ID AZ0604
- State of California, Department of Health Services, National Environmental Laboratory Accreditation Program (NELAP)

Approved Laboratory for Drinking Water, Wastewater and Hazardous Waste Lab ID 01105CA

- Los Angeles County Sanitation District
   Approved Laboratory for Wastewater
   Lab ID 10243
- State of California, Department of Health Services, Environmental Laboratory Accreditation Program (ELAP)

Approved Laboratory for Microbiology of Drinking Water and Wastewater Lab ID 2635

- State of Florida, Department of Health, Bureau of Laboratories (NELAP)
   Approved Environmental Testing Laboratory for Wastewater and Hazardous Waste Lab ID E87203
- State of Kansas, Department of Health and Environment (NELAP)
   Approved Laboratory for Hazardous Waste
   Lab ID E-10323
  - State of Massachusetts, Department of Environmental Protection
    Approved laboratory for Drinking Water and Wastewater

Lab ID M-CA025

State of Oklahoma, Department of Environmental Quality
 Annual Aleksandra for Consul Water Quality

Approved Laboratory for General Water Quality/Sludge Testing Lab ID 9952

- State of Oregon, Environmental Laboratory Accreditation Program (ORELAP)
   Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste
   Lab ID CA200004
- State of Utah, Department of Health, Bureau of Laboratory Improvement (NELAP)
   Approved Laboratory for Wastewater and Hazardous Waste
   Lab ID QUAL1
- State of Washington, Department of Ecology

Approved Laboratory for Wastewater and Hazardous Waste Lab ID C1234

State of Wisconsin, Department of Natural Resources
 Approved Laboratory for Wastewater and Hazardous Waste
 Lab ID 999767340

### Arizona Data Qualifiers

Revision 2.0, 11/26/2003

Developed by the Sub-committee of the Arizona Environmental Laboratory Advisory Committee

### Microbiology:

- A1 = Too numerous to count.
- A2 = Sample incubation period exceeded method requirement.
- A3 = Sample incubation period was shorter than method requirement.
- A4 = Target organism detected in associated method blank.
- A5 = Incubator/water bath temperature was outside method requirements.
- A6 = Target organism not detected in associated positive control.
- A7 = Micro sample received without adequate headspace.

#### Method/calibration blank:

- B1 = Target analyte detected in method blank at or above the method reporting limit.
- B2 = Non-target analyte detected in method blank and sample, producing interference.
- B3 = Target analyte detected in calibration blank at or above the method reporting limit.
- B4 = Target analyte detected in blank at/above method acceptance criteria.
- B5 = Target analyte detected in method blank at or above the method reporting limit, but below trigger level or MCL.
- B6 = Target analyte detected in calibration blank at or above the method reporting limit, but below trigger level or MCL.
- B7 = Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above the concentration found in the method blank.

#### Confirmation:

- C1 = Confirmatory analysis not performed as required by the method.
- C3 = Qualitative confirmation performed.
- C4 = Confirmatory analysis was past holding time.
- C5 = Confirmatory analysis was past holding time. Original result not confirmed.
- C6 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the higher value was reported as there was no obvious chromatographic interference.
- C7 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic interference.

#### Dilution:

- D1 = Sample required dilution due to matrix.
- D2 = Sample required dilution due to high concentration of target analyte.
- D3 = Sample dilution required due to insufficient sample.
- D4 = Minimum reporting level (MRL) adjusted to reflect sample amount received and analyzed.

#### Estimated concentration:

- E1 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
- E2 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
- E3 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to holding time requirements.

### Arizona Data Qualifiers Revision 2.0, 11/26/2003

- E4 = Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL).
- E5 = Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL), but not confirmed by alternate analysis.
- E6 = Concentration estimated. Internal standard recoveries did not meet method acceptance criteria.
- E7 = Concentration estimated. Internal standard recoveries did not meet laboratory acceptance criteria.
- E8 = Analyte reported to MDL per project specification. Target analyte was not detected in the sample.

#### Hold time:

- H1 = Sample analysis performed past holding time.
- H2 = Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
- H3 = Sample was received and analyzed past holding time.
- H4 = Sample was extracted past required extraction holding time, but analyzed within analysis holding time.

#### BOD:

- K1 = The sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2 mg/L. Any reported result is an estimated value.
- K2 = The sample dilutions set up for the BOD analysis did not meet the criteria of a residual dissolved oxygen of at least 1 mg/L. Any reported result is an estimated value.
- K4 = The seed depletion was outside the method acceptance limits. The reported result is an estimated value.
- K5 = The dilution water D.O. depletion was > 0.2 mg/L.
- K6 = Glucose/glutamic acid BOD was below method acceptance criteria.
- K7 = A discrepancy between the BOD and COD results has been verified by reanalysis of the sample for COD.
- K8 = Glucose/glutamic acid BOD was above method acceptance levels.

## Laboratory fortified blank/blank spike:

- L1 = The associated blank spike recovery was above laboratory acceptance limits.
- L2 = The associated blank spike recovery was below laboratory acceptance limits.
- L3 = The associated blank spike recovery was above method acceptance limits.
- L4 = The associated blank spike recovery was below method acceptance limits.

#### Matrix spike:

- M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.
- M2 = Matrix spike recovery was low, the method control sample recovery was acceptable.
- M3 = The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
- M4 = The analysis of the spiked sample required a dilution such that the spike concentration was diluted below the reporting limit. The method control sample recovery was acceptable.
- M5 = Analyte concentration was determined by the method of standard addition (MSA).

### Arizona Data Qualifiers Revision 2.0, 11/26/2003

M6 = Matrix spike recovery was high. Data reported per ADEQ policy 0154.000.

M7 = Matrix spike recovery was low. Data reported per ADEQ policy 0154.000.

#### General:

N1 = See case narrative.

N2 = See corrective action report.

N3 = The analysis meets all method requirements. See case narrative.

### Sample quality:

- Q1 = Sample integrity was not maintained. See case narrative.
- Q2 = Sample received with headspace.
- Q3 = Sample received with improper chemical preservation.
- Q4 = Sample received and analyzed without chemical preservation.
- Q5 = Sample received with inadequate chemical preservation, but preserved by the laboratory.
- Q6 = Sample was received above recommended temperature.
- Q7 = Sample inadequately dechlorinated.
- Q8 = Insufficient sample received to meet method QC requirements. Batch QC requirements satisfies ADEQ policies 0154 and 0155.
- Q9 = Insufficient sample received to meet method QC requirements.
- Q10 = Sample received in inappropriate sample container.
- Q11 = Sample is heterogeneous. Sample homogeneity could not be readily achieved using routine laboratory practices.

### Duplicates:

- R1 = RPD exceeded the method control limit. See case narrative.
- R2 = RPD exceeded the laboratory control limit. See case narrative.
- R4 = MS/MSD RPD exceeded the method control limit. Recovery met acceptance criteria.
- R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- R6 = LFB/LFBD RPD exceeded the method control limit. Recovery met acceptance criteria.
- R7 = LFB/LFBD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- R8 = Sample RPD exceeded the method control limit.
- R9 = Sample RPD exceeded the laboratory control limit.
- R10 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic problems.
- R11 = The RPD calculation for MS/MSD does not provide useful information due to the varying sample weights when Encore samplers/methanol field preserved samples are used.

#### Surrogate:

- S1 = Surrogate recovery was above laboratory acceptance limits, but within method acceptance limits.
- S3 = Surrogate recovery was above laboratory acceptance limits, but within method acceptance limits. No target analytes were detected in the sample.
- S4 = Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.
- S5 = Surrogate recovery was below laboratory acceptance limits, but within method acceptance limits.
- S6 = Surrogate recovery was below laboratory and method acceptance limits. Reextraction and/or reanalysis confirms low recovery caused by matrix effect.

### Arizona Data Qualifiers Revision 2.0, 11/26/2003

- S7 = Surrogate recovery was below laboratory and method acceptance limits. Unable to confirm matrix effect.
- S8 = The analysis of the sample required a dilution such that the surrogate recovery calculation does not provide any useful information. The method control sample recovery was acceptable.
- S10 = Surrogate recovery was above laboratory and method acceptance limits. See Case narrative.
- S11 = Surrogate recovery was high. Data reported per ADEQ policy 0154.000.
- S12 = Surrogate recovery was low. Data reported per ADEQ policy 0154.000.

### Method/analyte discrepancies:

- T1 = Method approved by EPA, but not yet licensed by ADHS.
- T2 = Cited ADHS licensed method does not contain this analyte as part of method compound list.
- T3 = Method not promulgated either by EPA or ADHS.
- T4 = Tentatively identified compound. Concentration is estimated and based on the closest internal standard.

#### Calibration verification:

- V1 = CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
- V2 = CCV recovery was above method acceptance limits. This target analyte was detected in the sample. The sample could not be reanalyzed due to insufficient sample.
- V3 = CCV recovery was above method acceptance limits. This target analyte was detected in the sample, but the sample was not reanalyzed. See case narrative.
- V4 = CCV recovery was below method acceptance limits. The sample could not be reanalyzed due to insufficient sample.
- V5 = CCV recovery after a group of samples was above acceptance limits. This target analyte was not detected in the sample. Acceptable per EPA Method 8000B.
- V6 = Data reported from one-point calibration criteria per ADEQ policy 0155.000.
- V7 = Calibration verification recovery was above the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
- V8 = Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.

### Calibration:

- W1 = The % RSD for this compound was above 20%. The average % RSD for all compounds in the calibration met the 20% criteria as specified in EPA method 8000B.
- W2 = The % RSD for this compound was above 15%. The average % RSD for all compounds in the calibration met the 15% criteria as specified in EPA method 8260B/8270C.

Client:

Project: Sky Harbor/2959482

Service Request: D0602066

## SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	<u>DATE</u>	<u>TIME</u>
D0602066-001	TB-121406	12/13/06	06:15
D0602066-002	ASE-116A-6D2	12/13/06	08:11
D0602066-003	ASE-111A-6D2	12/13/06	06:34
D0602066-004	ASE-115A-6D2	12/13/06	07:17

# **CASE NARRATIVE**

#### COLUMBIA ANALYTICAL SERVICES, INC.

Client: Honeywell International, Incorporated Service Request No.: D0602066

Project: Sky Harbor Date Received: 12/14/06

Sample Matrix: Aqueous

#### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables.

### Sample Receipt

4 Aqueous samples were received for analysis at Columbia Analytical Services on 12/14/06.

No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4 degrees Celsius upon receipt at the laboratory.

### TPH-Diesel/Motor Oil by EPA Method 8015B

#### **Spike Recovery Exceptions:**

The matrix spike recovery of TPH-Diesel for sample ASE-115A-6D2MS was outside control criteria. Recovery in the Duplicate Matrix Spike ASE-115A-6D2DMS and Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was taken.

### Volatile Organic Compounds by EPA Method 8260B

#### **Elevated Method Reporting Limits:**

Samples ASE-116A-6D2 and ASE-115A-6D2 required a dilution due to the presence of elevated levels of Tertbutylmethylether and Benzene. The reporting limits were adjusted to reflect the dilution.

#### **Spike Recovery Exceptions:**

The matrix spike and matrix spike duplicate yielded several percent recoveries and one %RPD's outside control limits. No further corrective action was taken.

#### Polynuclear Aromatic Hydrocarbons by EPA Method 8310

### **Elevated Method Reporting Limits:**

Samples ASE-116A-6D2, ASE-115A-6D2, ASE-115A-6D2MS, and ASE-115A-6D2MSD required dilutions due to the presence of elevated levels of target analytes. The reporting limits are adjusted to reflect the dilutions.

#### Other

The presence of Acenaphthylene was confirmed in sample ASE-115A-6D2 using GC/MS

Approved by: Maly Far Date: 12/29/06

# CHAIN OF CUSTODY DOCUMENTATION

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11 4 2-fry 6/anks cell 400-710-5973



5090 Caterpillar Road Redding, CA 96003

Phone: (530) 244-5262

#### COOLER RECEIPT FORM

Proje	ct/Client: TCI/ + tenguell	Batch No.:
1.	Cooler(s)/Sample(s) received on: 12(14)06	Shipped via: UPS
	Shipping Bill # (s): Valeious	# of Coolers/Packages 5
2.	Radiological Screening by: TR	Acceptable Rejected
3.	Custody seals on outside of cooler:  If yes, where? Front Rear Lt Side Rt Side	YES NO N/A
	Seals intact:	YES NO
***************************************	COOLER/SAMPLE PROCESS	ING
4.	Sample Processing/Tagging by Dam POO	
5.	Cooler(s)/Sample(s) Temp's: 4°C 3°C 3°C	4°C 2°C
	Temp. Blank (if included):	
6.	Type of packing material (circle) Lee Blue Ice Bubble Wrap Bul	bble Bags Zip Lock's Webbing
	Other:	
7.	Custody papers properly filled out (ink, signed, dated, released, etc.)?	YES NO
8.	Containers arrived in good condition (not broken, leaking, etc.)?	YES NO
9.	Samples received with adequate holding time remaining to conduct analyst	sis? YES NO
10.	Container labels complete (i.e. analysis, preservation, date/time, etc.)?	YES NO
11.	Container labels and tags agree with custody papers?	YES NO
12.	Correct types of containers used for the tests indicated?	YES NO
	a.) Adequate sample received? If not, note on Exception Report	t. YES NO
13.	Containers supplied by:	CAS Other
14.	Preserved containers received with the appropriate preservative?  pH: VAS (a) V DV DV (or) See pH log.	YES NO N/A
15.	VOA vials free of air bubbles?	YES NO N/A
16.	Trip Blank preparation date:	(CAS) Other N/A
17.	Volatile Soil samples: Encores or Plugs in Vials	
	Freezer or GC/MS Dat	e:Time:N/A

See Exception Report for discrepancies.

### TPH – Diesel and Motor Oil

Client: Project: Honeywell International, Incorporated

Sky Harbor/2959482

Service Request:

D0602066

Cover Page - Organic Analysis Data Package TPH-Diesel / Motor Oil Range Organics by SW8015B

		Date	Date
Sample Name	Lab Code	Collected	Received
ASE-116A-6D2	D0602066-002	12/13/2006	12/14/2006
ASE-111A-6D2	D0602066-003	12/13/2006	12/14/2006
ASE-115A-6D2	D0602066-004	12/13/2006	12/14/2006
ASE-115A-6D2MS	DWG0601071-1	12/13/2006	12/14/2006
ASE-115A-6D2DMS	DWG0601071-2	12/13/2006	12/14/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:	Wida Ang	Name: WIDA ANG
Date:	12/21/06	Title: Organic Manager

RR13321

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602066

**Date Collected:** 12/13/2006

**Date Received:** 12/14/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-116A-6D2

Lab Code:

D0602066-002

Units: ug/L

Basis: NA

Extraction Method:

EPA 3510C

Level: Low

Analysis Method:

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	190 J	480	20	1	12/18/06	12/20/06	E4
C22 - C32 HRO (TPH-Motor Oil)	<b>50</b> J	480	30	1	12/18/06	12/20/06	E4

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	84	26-152	12/20/06		
Tricontane	83	40-140	12/20/06		

Comments:

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Form 1A - Organic

Page 1 of 1

SuperSet Reference: RR13321

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602066

Date Collected: 12/13/2006

**Date Received:** 12/14/2006

#### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-111A-6D2

Lab Code:

D0602066-003

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	<b>90</b> J	480	20	1	12/18/06	12/20/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/18/06	12/20/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	81	26-152	12/20/06		
Tricontane	81	40-140	12/20/06		

Comments:

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Page 1 of

SuperSet Reference: RR13321

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602066

Date Collected: 12/13/2006

**Date Received:** 12/14/2006

#### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-115A-6D2

Lab Code:

D0602066-004

Units: ug/L

Basis: NA

Extraction Method:

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed Not	t <b>e</b>
C10 - C22 DRO (TPH-Diesel)	<b>720</b>	480	20	1	12/18/06	12/20/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/18/06	12/20/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
Octacosane	79	26-152	12/20/06			
Tricontane	78	40-140	12/20/06			

Comments:

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Form 1A - Organic

Page 1 of

SuperSet Reference: RR13321

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602066

Date Collected: NA

Date Received: NA

#### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

Method Blank

Lab Code:

DWG0601071-4

Units: ug/L

Basis: NA

**Extraction Method:** 

Level: Low

Analysis Method:

EPA 3510C

8015B

			Dilution	Date	Date	
Analyte Name	Result Q	PQL MDL	Factor	Extracted	Analyzed Note	e
C10 - C22 DRO (TPH-Diesel)	ND U	500 20	1	12/18/06	12/20/06	-
C22 - C32 HRO (TPH-Motor Oil)	ND U	500 30	1	12/18/06	12/20/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
Octacosane	76	26-152	12/20/06			
Tricontane	74	40-140	12/20/06			

Comments:

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Form 1A - Organic

1 of 1

18

RR13321

SuperSet Reference:

QA/QC Report

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602066

**Surrogate Recovery Summary** 

TPH-Diesel / Motor Oil Range Organics by SW8015B

Extraction Method: EPA 3510C

**Analysis Method:** 

8015B

Units: PERCENT

Level: Low

Sample Name	Lab Code	Sur1	Sur2
ASE-116A-6D2	D0602066-002	84	83
ASE-111A-6D2	D0602066-003	81	81
ASE-115A-6D2	D0602066-004	79	78
Method Blank	DWG0601071-4	76	74
ASE-115A-6D2MS	DWG0601071-1	72	70
ASE-115A-6D2DMS	DWG0601071-2	82	80
Lab Control Sample	DWG0601071-3	89	86

Surrogate Recovery Control Limits (%)

26-152 Sur1 = Octacosane Sur2 = Tricontane 40-140

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

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Form 2A - Organic

1 of

SuperSet Reference: RR13321

QA/QC Report

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602066

Date Extracted: 12/18/2006

**Date Analyzed:** 12/20/2006

Matrix Spike/Duplicate Matrix Spike Summary TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-115A-6D2

Lab Code:

D0602066-004

Units: ug/L Basis: NA

Level: Low

**Extraction Method: Analysis Method:** 

EPA 3510C

8015B

Extraction Lot: DWG0601071

ASE-115A-6D2MS

ASE-115A-6D2DMS

DWG0601071-1

DWG0601071-2

2170

Matrix Spike

**Duplicate Matrix Spike** 

61

Sample Result **Analyte Name** C10 - C22 DRO (TPH-Diesel) 720

%Rec Result Expected 1790 2380 45 M2 Result Expected %Rec

2380

%Rec **RPD** Limits **RPD** Limit

30 61-143 19

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Page 1 of

SuperSet Reference: RR13321

QA/QC Report

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602066

**Date Extracted:** 12/18/2006

**Date Analyzed:** 12/20/2006

Lab Control Spike Summary TPH-Diesel / Motor Oil Range Organics by SW8015B

Extraction Method:

EPA 3510C

Analysis Method:

Analyte Name

C10 - C22 DRO (TPH-Diesel)

C22 - C32 HRO (TPH-Motor Oil)

8015B

Units: ug/L

Basis: NA Level: Low

Extraction Lot: DWG0601071

Lab Control Sample DWG0601071-3

Lab Control Spike

%Rec Result %Rec Limits Expected 1550 2500 61-143 62 1760 2500 70 60-120

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Page 1 of

SuperSet Reference:

RR13321

### GC/MS VOLATILE ORGANICS

#### ORGANIC ANALYSES DATA PACKAGE

Analytical Method	: SW8260		AAB #: <u>D0602066</u>	
Lab Name: Colum	mbia Analytical Services/Redding			
Base/Command: I	HONEYWELL SKY HARBOR			
Project: Sky Ha	arbor			
	Field Sample ID		Lab Sample ID	
	TB-121406		D0602066-001	
	ASE-116A-6D2		D0602066-002	-
	ASE-116A-6D2DL		D0602066-002DL	
	ASE-111A-6D2		D0602066-003	
	ASE-115A-6D2		D0602066-004	_
	ASE-115A-6D2DL		D0602066-004DL	
	ASE-115A-6D2MS		D0602066-004MS	-
	ASE-115A-6D2MSD		D0602066-004MSD	-
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completeness, for or	ther than the conditions detailed ab	ove. Rele te has beer	onditions of the contract, both technicall ase of the data contained in this hardcon authorized by the Laboratory Manage	py data package
Signature:	73m	Name:	Brian Moore	
Date:	12/28/06	Title:	Brian Moore Technical manager	_

RDD-061228:BG:BS-1439PST-SR:D0602066-D0602066-V

Analytical Method: SW8260			AAB #: <u>D0602066</u>
Lab Name: Columbia Analytical Services/Reddin	g		
Field Sample ID: TB-121406	Lab Sample ID:	D0602066-001	Matrix: Water
% Solids:		Initial Calib	ration ID: <u>12/05/06MSM</u>
Date Received: 12/14/06 Date Extra	acted:	Date Anal	yzed: 12/20/06
Concentration Units (ug/L or ug/Kg dry weight):	UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	1.9	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND.	1.		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	ND	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		*******
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	***************************************			AAB #:_	D0602066
Lab Name: Columbia Analytical Serv	ices/Reddir	ng			
Field Sample ID: TB-121406	****	Lab Sample ID:	D0602066-001	Matrix:	Water
% Solids:			Initial Calib	oration ID	: 12/05/06MSM
Date Received: 12/14/06	Date Extra	acted:	Date Ana	lyzed: 12	2/20/06
Concentration Units (ug/L or ug/Kg dry	weight):	UG/L	Sample Volume:	5.000	ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	ND	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1	'	
Xylene (total)	0.14	. 10	ND	. 1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1	' '	
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	ND	. 1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1 .		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Analytical M	lethod: SW8260						AAB #: <u>D</u>	0602066	
Lab Name:	Columbia Analyti	ical Services/R	Redding						
	e ID: <u>TB-121406</u>		4.	ab Sample ID:	D06020	066-001	Matrix: _V	Vater	
% Solids:						Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	ed: 12/14/06	Date	Extracte	ed:		Date Anal	yzed: 12/2	0/06	
Concentratio	n Units (ug/L or ug	g/Kg dry weig	ht): <u>U</u>	G/L	Sam	ple Volume:	5.000 M	<u>L</u>	
	Analyte		MD	L RL	Co	oncentration	Dilution	Confirm	Qualifier
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	Sur	rogate		Recovery		Control Limits	s Qua	lifier	
	4-Bromofluorob	enzene - SS		102		82-124			
	Dibromofluoron			102	-	84-127			
	Toluene-d8 - SS			98	_	80-117			
		w. Carl	Internal	Standard		Qualifier	_		
		Fluorobenze					_		
		Chlorobenze		-d4			1		
		1,4-Diemore	3001120110	-4-1			_		
						Surrogate Recove	orias ara ranos	etad in Annanc	liv O 1
Comments:						Internal Stand			
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Analytical Method: SW8260	***************************************	AAB #:D0602066
Lab Name: Columbia Analytical Serv	ices/Redding	
Field Sample ID: ASE-116A-6D2	Lab Sample ID:	D0602066-002 Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/14/06	Date Extracted:	Date Analyzed: 12/18/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.62	1		E4
Acetone	1.0	20	1.5	1		E4
Carbon disulfide	0.11	5.0	ND	1		. :
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	200	1		
1,1-Dichloroethane	0.12	2.0	0.74	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	1.8	1		E4
2-Butanone	0.90	10	ND	1 .		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	260	. 1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	7.5	1		
1,2-Dichloropropane	0.17	2.0	ND	1	,	
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

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Comments:		Internal Standards are reported in Appendix O-C
		Surrogate Recoveries are reported in Appendix O-A

Analytical Method: SW8260			AAB #: <u>D0602066</u>	
Lab Name: Columbia Analytical Serv	vices/Redding			
Field Sample ID: ASE-116A-6D2	Lab Sample ID:	D0602066-002	Matrix: Water	
% Solids:		Initial Cali	bration ID: 12/05/06MS	<b>M</b>
Date Received: 12/14/06	Date Extracted:	Date An	alyzed: 12/18/06	-
Concentration Units (ug/L or ug/Kg dry	weight): IIG/L	Sample Volume	5 000 MI	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.85	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	120	1		
Xylene (total)	0.14	10	5.0	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	37	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	32	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	1.2	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5,0	0.68	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	7.1	1		
sec-Butylbenzene	0.17	5.0	4.2	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.54	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	84	1		
1,2,3-Trichlorobenzene	0.37	5.0	. ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	lethod: SW8260				AAB #:	00602066	1.00.000
Lab Name:	Columbia Analyt	ical Services/Redding	9				
Field Sample	ID: ASE-116A	-6D2	Lab Sample ID:	D0602066-002	Matrix:V	Water	
% Solids:				Initial Cali	bration ID: _	12/05/06M	SM
		Date Extra	cted:	Date Ana	alyzed: 12/1	8/06	
		g/Kg dry weight):					
	Analyte	М	DL RL	Concentration	Dilution	Confirm	Qualifi
	4 (Allowaya V.						
	4-7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-			uturr -			
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33.2002.000							
		rrogate	Recovery	Control Limi	ts Qua	llifier	
	4-Bromofluorob Dibromofluoror		99	82-124 84-127			
	Toluene-d8 - SS		99	80-117			
		•		-			
		Intern	al Standard	Qualifier	. 7		
		Fluorobenzene	ai Standard	Quanner	_		
		Chlorobenzene-d5	AND AND AND AND AND AND AND AND AND AND				
		1,4-Dichlorobenze	ne-d4				
C				Surrogate Reco Internal Stan	veries are repo dards are repo		
Comments:	. W. W. W. W. W. W. W. W. W. W. W. W. W.		Marie Company and Company and Company and Company and Company and Company and Company and Company and Company			TF	
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Analytical Method: SW8260		AAB #:
Lab Name: Columbia Analytical S	ervices/Redding	
Field Sample ID: ASE-116A-6D2	DL Lab Sample ID	: D0602066-002DL Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/14/06	Date Extracted:	Date Analyzed: 12/20/06
Concentration Units (ug/L or ug/Kg	dry weight): LIG/I	Sample Volume: 5 000 MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	3.6	50	ND	10		D2
Chloromethane	2.3	50	ND	10		D2
Vinyl chloride	2.2	10	ND	10		D2
Bromomethane	2.7	10	ND	10		D2
Chloroethane	2.0	50	ND	10		D2 .
Trichlorofluoromethane	1.4	50	ND	10		D2
1,1-Dichloroethene	1.9	20	ND	10		D2
Acetone	10	200	ND	10		D2
Carbon disulfide	1.1	50	ND	10		D2
Methylene chloride	1.5	50	ND	10		D2
Iodomethane	2.0	100	ND	10		D2
trans-1,2-Dichloroethene	1.6	20	ND	10		D2
Tert-butylmethylether	1.7	10	220	10		D2
1,1-Dichloroethane	1.2	20	ND	10		D2
Vinyl acetate	8.4	250	ND	10	-	D2
2,2-Dichloropropane	3.3	20	ND	10		D2
cis-1,2-Dichloroethene	1.7	20	1.8	10		D2E4
2-Butanone	9.0	100	ND	10		D2
Bromochloromethane	2.5	50	ND	10	-	D2 ·
Chloroform	1.4	20	ND	10		D2
1,1,1-Trichloroethane	1.4	20	ND	10		D2
1,1-Dichloropropene	1.8	20	ND	10		D2
Carbon tetrachloride	1.8	20	ND	10		D2
Benzene	1.2	10	830	10		D2
1,2-Dichloroethane	1.8	10	ND	10		D2
Trichloroethene	1.0	10	7.1	10		D2E4
1,2-Dichloropropane	1.7	20	ND	10		D2
Dibromomethane	1.8	20	ND	10		D2
Bromodichloromethane	1.7	10	ND	10		D2
cis-1,3-Dichloropropene	1.3	20	ND	10		D2
4-methyl-2-pentanone	8.5	100	ND	10		D2
Toluene	1.4	20	ND	10		D2
trans-1,3-Dichloropropene	1.9	20	ND	10		D2

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB #: <u>D0602066</u>
Lab Name: Columbia Analytical Serv	ces/Redding
Field Sample ID: ASE-116A-6D2DL	Lab Sample ID: D0602066-002DL Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/14/06	Date Extracted: Date Analyzed:
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	2.2	10	ND	10		D2
Tetrachloroethene	2.2	10	ND	10		D2
1,3-Dichloropropane	1.1	20	ND	10		D2
2-Hexanone	5.8	100	ND	10		D2
Dibromochloromethane	1.5	20	ND	10		D2
1,2-Dibromoethane	1.5	20	ND	10		D2
Chlorobenzene	1.5	10	ND	10		D2
1,1,1,2-Tetrachloroethane	2.3	50	ND	10		D2
Ethylbenzene	1.5	20	320	10	,	D2
Xylene (total)	1.4	100	4.9	10		D2E4
Styrene	1.6	20	ND	10		D2
Bromoform	1.8	50	ND	10		D2
Isopropylbenzene	1.7	20	36	10		D2
1,1,2,2-Tetrachloroethane	1.7	10	ND	10		D2
Bromobenzene	1.7	50	ND	10		D2
1,2,3-Trichloropropane	2.0	100	ND	10		D2
n-Propylbenzene	1.3	20	28	10		D2 ·
2-Chlorotoluene	1.6	50	ND	10	14.	D2
1,3,5-Trimethylbenzene	1.5	20	ND	10		D2
4-Chlorotoluene	1.6	50	ND	10		D2
tert-Butylbenzene	1.8	50	ND	10		D2
1,2,4-Trimethylbenzene	1.3	20	6.1	10		D2E4
sec-Butylbenzene	1.7	50	3.9	10		D2E4
1,3-Dichlorobenzene	1.1	10	ND	10		D2
p-Isopropyltoluene	1.0	20	ND	10		D2
1,4-Dichlorobenzene	1.1	10	ND	10		D2
n-Butylbenzene	3.3	50	ND	10		D2
1,2-Dichlorobenzene	1.4	10	ND	10		D2
1,2-Dibromo-3-chloropropane	8.1	50	ND	10		D2
1,2,4-Trichlorobenzene	3.6	50	ND ND	10		D2
Hexachlorobutadiene	6.0	10	ND	10		D2
Naphthalene	2.9	20	89	10		D2
1,2,3-Trichlorobenzene	3.7	50	ND	10		D2

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	Method: SW8260	,	-			AAB #: <u>_</u>	00602066	-
Lab Name:	Columbia Analyt	ical Services/I	Redding	i las				
Field Sample	e ID: ASE-116A	-6D2DL	Lab	Sample ID: I	00602066-002DL	_ Matrix: _\	Vater	
% Solids: _					Initial Calib	oration ID:	12/05/06M	SM
Date Receive	ed: 12/14/06	Date	e Extracted:	:	Date Ana	lyzed: 12/2	20/06	
					Sample Volume:			-
	Analyte		MDL	RL	Concentration	Dilution	Confirm	Quali
			1.111.111.111					
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	AL		-					
		rrogate		Recovery Control I		s Qua	lifier	
	4-Bromofluorob Dibromofluoron		-	100 95	82-124 84-127			
	Toluene-d8 - SS			98	80-117			
			Internal Standard		Qualifier			
	-	Fluorobenze	ene					
		Chlorobenze						
		1,4-Dichlorobenzen			<u> </u>	J		
					Summaruta Passau		to disc down and	O 1
Comments:					Surrogate Recov Internal Stana			
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Analytical Method: SW8260	AAB #: D0602066	
Lab Name: Columbia Analytical Serv	ices/Redding	
Field Sample ID: ASE-111A-6D2	Lab Sample ID: D0602066-003 Matrix: Water	
% Solids:	Initial Calibration ID: 12/05/06MSM	_
Date Received: 12/14/06	Date Extracted: Date Analyzed:	
Concentration Units (ug/L or ug/Kg dry	weight): LIG/L Sample Volume: 5 000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	. ND	1	,	
Bromomethane	0.27	1.0	ND	I		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1	·	
1,1-Dichloroethene	0.19	2.0	0.75	1		E4
Acetone	1.0	20	2.2	1		E4
Carbon disulfide	0.11	5.0	ND	1 .		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	110	1		
1,1-Dichloroethane	0.12	2.0	0.80	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	. ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.98	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		-
Chloroform	0.14	2.0	0.80	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	130	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	6.0	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:				Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
			year grant and the state of the	
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Analytical Method: SW8260	***************************************		AAB #:	D0602066	
Lab Name: Columbia Analytical Serv	vices/Redding				
Field Sample ID: ASE-111A-6D2	Lab Sample ID:	D0602066-003	Matrix: _	Water	
% Solids:		Initial Calib	ration ID:	12/05/06MSM	
Date Received: 12/14/06	Date Extracted:	Date Anal	lyzed: 12/	/18/06	
Concentration Units (ug/L or ug/Kg dry	y weight): UG/L	Sample Volume:	5.000 N	ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	2.0	1	·	
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	24	1		
Xylene (total)	0.14	10	54	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	3.8	- 1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	3.6	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	4.6	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.24	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	14	1		
sec-Butylbenzene	0.17	5.0	1.6	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.72	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	10	1	L	
1,2,3-Trichlorobenzene	0.37	5.0	ND	1	-	

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260	. · A**				AA	AB #: <u>D</u>	0602066	
Lab Name:	Columbia Analyti	ical Services/Redding	9						
Field Sample	ID: ASE-111A	-6D2	Lab Sa	mple I <u>D:</u> D	0602066-003	M	atrix: <u>V</u>	Vater	
% Solids:	100 40 40 40				Initial (	Calibrati	on ID:	12/05/06M	SM
Date Receive	d: 12/14/06	Date Extra	cted:		Date	Analyze	ed: 12/1	8/06	
		g/Kg dry weight):							
	Analyte	М	DL	RL	Concentra	tion D	ilution	Confirm	Qualifie
JA-AM-410-A-7									
	THE STATE OF THE S								
	-								
	-								
0.200				- INCINEUR					
	Cont	wagata	р	Recovery Control Lin		imite	nits Qualifier		
	4-Bromofluorob	rogate enzene - SS	K	ecovery 103	82-12		Qua	itilei	
	Dibromofluoron			97	84-12				
	Toluene-d8 - SS			100	80-11	7			
		Intern	al Stanc	lard	Quali	fier			
		Fluorobenzene							
	Chlorobenzene-d5								
		1,4-Dichlorobenze	ne-d4						
								ted in Append	
Comments:					Internal	sianaards	are repor	ted in Append	ıx O-C
	-								

Analytical Method: SW8260			AAB #: <u>D0602066</u>	
Lab Name: Columbia Analytical Ser	vices/Redding			
Field Sample ID: ASE-115A-6D2	Lab Sample ID:	D0602066-004	Matrix: Water	
% Solids:		Initial Calib	oration ID: <u>12/05/06MSM</u>	
Date Received: 12/14/06	Date Extracted:	Date Anal	lyzed: 12/18/06	
Concentration Units (ug/L or ug/Kg dr	wweight): UG/L	Sample Volume	5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	0.47	1		E4
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.57	1		E4
Acetone	1.0	20	2.6	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	320	1		
1,1-Dichloroethane	0.12	2.0	0.66	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	. 0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	1.5	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.35	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	520	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	2.6	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.77	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Toluene	0.14	2.0	0.77	1		F
trans-1,3-Dichloropropene	0.19	2.0	ND	1		
Comments:			Surrogate Recov Internal Stand	•	* * *	
		-				

Analytical Method: SW8260	AAB #: D0602066
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-115A-6D2 Lab Sample ID: D0602066-004	Matrix: Water
% Solids: Initial Calib	pration ID: 12/05/06MSM
Date Received: 12/14/06 Date Extracted: Date Ana	lyzed: 12/18/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.86	1		E4
1,3-Dichloropropane	0.11	2.0	. ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	130	1		
Xylene (total)	0.14	10	26	1		
Styrene	0.16	2.0	0.69	1		E4
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	56	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	61	. 1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	11	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	1.4	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	60	1		
sec-Butylbenzene	0.17	5.0	9.5	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	3.9	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	5.2	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	120	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	Iethod: SW8260						AAB#:_D	0602066	
Lab Name:	Columbia Analyt	ical Services/Reddin	g						
Field Sample	e ID: <u>ASE-115A</u>	-6D2	Lab S	ample ID: D	0602	2066-004	Matrix: V	Vater	
% Solids:		All Mindle and Prince				Initial Calib		-	SM
Date Receive	ed: 12/14/06	Date Extra	icted:			Date Anal	yzed: 12/1	8/06	
		g/Kg dry weight):							
	Analyte	М	DL	RL	C	oncentration	Dilution	Confirm	Qualifier
						,			
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	Sur	rogate	F	Recovery		Control Limits	Qua	lifier	
	4-Bromofluorob		97			82-124			
	Dibromofluoron			96	-	84-127			
	Toluene-d8 - SS	***************************************	ļ	96	80-117				
Interna		al Stan	dard		Qualifier	_			
		Fluorobenzene							
Chlorobenzene-d5				no d4			-		
		1,4-Diemorouchize	1,4-Dichlorobenzene-d4						
						Compagne Parama		to die desert	÷- 0 1
Comments:						Surrogate Recove Internal Standa			
±1	7-01-00-00-01-1-1-1-1-1-1-1-1-1-1-1-1-1-			1.4444444				,	

Analytical Method: SW8260		AAB #: D0602066
Lab Name: Columbia Analytical Serv	ices/Redding	
Field Sample ID: ASE-115A-6D2DL	Lab Sample ID: D0602066-004DL	Matrix: Water
% Solids:	Initial Cali	bration ID: 12/05/06MSM
Date Received: 12/14/06	Date Extracted: Date Ana	alyzed: 12/20/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	14	200	ND	40		D2
Chloromethane	9.2	200	ND	40		D2
Vinyl chloride	8.8	40	ND	40		D2
Bromomethane	11	40	ND	40		D2
Chloroethane	8.0	200	ND	40		D2
Trichlorofluoromethane	5.6	200	ND	40		D2
1,1-Dichloroethene	7.6	80	ND	40		D2
Acetone	40	800	ND	40		D2
Carbon disulfide	4.4	200	ND	40		D2
Methylene chloride	6.0	200	ND	40		D2
Iodomethane	8.0	400	ND	40		D2
trans-1,2-Dichloroethene	6.4	80	ND	40		D2
Tert-butylmethylether	6.8	40	650	40		D2
1,1-Dichloroethane	4.8	80	ND	40		D2
Vinyl acetate	34	1000	ND	40		D2
2,2-Dichloropropane	13	80	ND	40		D2
cis-1,2-Dichloroethene	6.8	80	ND	40		D2
2-Butanone	36	400	ND	40		D2
Bromochloromethane	01	200	ND	40		D2
Chloroform	5.6	80	ND	40		D2
1,I,I-Trichloroethane	5.6	80	ND	40		D2
1,1-Dichloropropene	7.2	80	ND	40		D2
Carbon tetrachloride	7.2	80	ND	40		D2
Benzene	4.8	40	3400	40		D2
1,2-Dichloroethane	7.2	40	ND ND	40		D2
Trichloroethene	4.0	40	4.8	40		D2E4
1,2-Dichloropropane	6.8	80	ND	40		D2
Dibromomethane	7.2	80	ND	40		D2
Bromodichloromethane	6.8	40	ND	40		D2
cis-1,3-Dichloropropene	5.2	80	ND	40	-	D2
4-methyl-2-pentanone	34	400	ND	40		D2
Toluene	5.6	80	ND	40		D2
trans-1,3-Dichloropropene	7.6	80	ND	40		D2

Comments:			Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
		-	

Analytical Method: SW8260	AAB #: D0602066
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-115A-6D2DL Lab Sample ID: D0602066-004DL	Matrix: Water
% Solids: Initial Ca	libration ID: 12/05/06MSM
Date Received: 12/14/06 Date Extracted: Date Ar	nalyzed: 12/20/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L Sample Volume	e: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	8.8	40	ND	40		D2
Tetrachloroethene	8.8	40	ND	40		D2
1,3-Dichloropropane	4.4	80	ND	40		D2
2-Hexanone	23	400	ND	40		D2
Dibromochloromethane	6.0	80	ND	40		D2
1,2-Dibromoethane	6.0	80	ND	40		D2
Chlorobenzene	6.0	40	ND	40		D2
1,1,1,2-Tetrachloroethane	9.2	200	ND	40		D2
Ethylbenzene	6.0	80	520	40		D2
Xylene (total)	5.6	400	24	40		D2E4
Styrene	6.4	80	ND	40		D2
Bromoform	7.2	200	ND	40		D2
Isopropylbenzene	6.8	80	59	40		D2E4
1,1,2,2-Tetrachloroethane	6.8	40	ND	40		D2
Bromobenzene	6.8	200	ND	40		D2
1,2,3-Trichloropropane	8.0	400	ND	40		D2
n-Propylbenzene	5.2	80	57	40		D2E4
2-Chlorotoluene	6.4	200	ND	40		D2
1,3,5-Trimethylbenzene	6.0	80	11	40		D2E4
4-Chlorotoluene	6.4	200	ND	40		D2
tert-Butylbenzene	7.2	200	ND	40		D2
1,2,4-Trimethylbenzene	5.2	80	64	40		D2E4
sec-Butylbenzene	6.8	200	9.3	40	-	D2E4
1,3-Dichlorobenzene	4.4	40	ND	40		D2
p-Isopropyltoluene	4.0	80	ND	40		D2
1,4-Dichlorobenzene	4.4	40	ND	40	-	D2
n-Butylbenzene	13	200	ND	40		D2
1,2-Dichlorobenzene	5.6	40	ND	40		D2
1,2-Dibromo-3-chloropropane	32	200	ND	40		D2
1,2,4-Trichlorobenzene	14	200	ND	40		D2
Hexachlorobutadiene	24	40	ND	40		D2
Naphthalene	12	80	220	40		D2
1,2,3-Trichlorobenzene	15	200	ND	40		D2

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C

Analytical M	1ethod: <u>SW8260</u>						AAB #:D	0602066	
Lab Name:	Columbia Analyt	ical Services/Reddin	g						
Field Sample	e ID: <u>ASE-115A</u>	-6D2DL	Lab Samp	ole ID:	D0602	2066-004DL	Matrix: _V	Vater	
% Solids:						Initial Calib	ration ID:	12/05/06M	SM
Date Receive	ed: 12/14/06	Date Extra	cted:			Date Anal	yzed: 12/2	0/06	
		g/Kg dry weight):							
	Analyte	М	DL	RL	С	Concentration	Dilution	Confirm	Qualif
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	Sur	rogate	Reco	overy		Control Limits	Qua	lifier	
	4-Bromofluorob			07		82-124		***************************************	
	Dibromofluoron Toluene-d8 - SS			99		84-127 80-117			
		T4	-1641	1		01:6	7		
		Fluorobenzene	al Standar	a		Qualifier	-		
		Chlorobenzene-d5							
	-	1,4-Dichlorobenze	ne-d4						
						Surrogate Recove			
Comments:						Internal Stando	aus are report	ea in Appendi	. O-C
						1907-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1			

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1218W01
Lab Sample ID: M1218W01	
Initial Calibration ID: 12/05/06MSM	

Analyte	MDL	Method Blank	RL	Q
Dichlorodifluoromethane	0.36	ND	5.0	
Chloromethane	0.23	ND	5.0	
Vinyl chloride	0.22	ND	1.0	
Bromomethane	0.27	ND	1.0	
Chloroethane	0.20	ND	5.0	
Trichlorofluoromethane	0.14	ND	5.0	
1,1-Dichloroethene	0.19	ND	2.0	
Acetone	1.0	ND	20	
Carbon disulfide	0.11	ND	5.0	
Methylene chloride	0.15	ND	5.0	
Iodomethane	0.20	ND	10	
trans-1,2-Dichloroethene	0.16	ND	2.0	
Tert-butylmethylether	0.17	ND	1.0	
1,1-Dichloroethane	0.12	ND	2.0	
Vinyl acetate	0.84	ND	25	
2,2-Dichloropropane	0.33	ND	2.0	
cis-1,2-Dichloroethene	0.17	ND	2.0	
2-Butanone	0.90	ND	10	
Bromochloromethane	0.25	ND	5.0	/A. A. A. A. A. A. A. A. A. A. A. A. A. A
Chloroform	0.14	0.30	2.0	E4
1,1,1-Trichloroethane	0.14	ND	2.0	
1,1-Dichloropropene	0.18	ND	2.0	
Carbon tetrachloride	0.18	ND	2.0	
Benzene	0.12	ND	1.0	
1,2-Dichloroethane	0.18	ND	1.0	
Trichloroethene	0.10	ND	1.0	
1,2-Dichloropropane	0.17	ND	2.0	
Dibromomethane	0.18	ND	2.0	
Bromodichloromethane	0.17	ND	1.0	****
cis-1,3-Dichloropropene	0.13	ND	2.0	
4-methyl-2-pentanone	0.85	ND	10	
Toluene	0.14	ND	2.0	
trans-1,3-Dichloropropene	0.19	ND	2.0	

Comments:		

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	9
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1218W01
Lab Sample ID: M1218W01	
Initial Calibration ID: 12/05/06MSM	

Analyte	MDL	Method Blank	RL	Q
1,1,2-Trichloroethane	0.22	ND	1.0	
Tetrachloroethene	0.22	ND	1.0	
1,3-Dichloropropane	0.11	ND	2.0	
2-Hexanone	0.58	ND	10	
Dibromochloromethane	0.15	ND	2.0	
1,2-Dibromoethane	0.15	ND	2.0	
Chlorobenzene	0.15	ND	1.0	
1,1,1,2-Tetrachloroethane	0.23	ND	5.0	
Ethylbenzene	0.15	ND	2.0	
Xylene (total)	0.14	ND	10	
Styrene	0.16	ND	2.0	
Bromoform	0.18	ND	5.0	
Isopropylbenzene	0.17	ND	2.0	
1,1,2,2-Tetrachloroethane	0.17	ND	1.0	
Bromobenzene	0.17	ND	5.0	
1,2,3-Trichloropropane	0.20	ND	10	
n-Propylbenzene	0.13	ND	2.0	
2-Chlorotoluene	0.16	ND	5.0	
1,3,5-Trimethylbenzene	0.15	ND	2.0	
4-Chlorotoluene	0.16	ND	5.0	
tert-Butylbenzene	0.18	ND	5.0	
1,2,4-Trimethylbenzene	0.13	ND	2.0	
sec-Butylbenzene	0.17	ND	5.0	
1,3-Dichlorobenzene	0.11	ND	1.0	
p-Isopropyltoluene	0.10	ND	2.0	
1,4-Dichlorobenzene	0.11	ND	1.0	
n-Butylbenzene	0.33	ND	5.0	
1,2-Dichlorobenzene	0.14	ND	1.0	
1,2-Dibromo-3-chloropropane	0.81	ND	5.0	
1,2,4-Trichlorobenzene	0.36	ND	5.0	
Hexachlorobutadiene	0.60	ND	1.0	
Naphthalene	0.29	ND	2.0	
1,2,3-Trichlorobenzene	0.37	ND	5.0	

Comments:	See go	

Analytical	Method: SW826	0	AAB #:	D06020	66		
Lab Name:	Columbia Anal	ytical Services/Reddir	ng				
Concentrat	ion Units (ug/L or	mg/kg): UG/L	Meth	od Blan	k ID: <u>M1218V</u>	V01	
Lab Sampl	e ID: <u>M1218W0</u>	1					
Initial Calil	bration ID: 12/05	/06MSM					
	Ana	lyte	MDL	Metho	od Blank	RL	Q
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	Sur	rrogate	Recovery	Co	ontrol Limits	Qualifier	
	4-Bromofluorol	enzene - SS	100		82-124		
	Dibromofluoror Toluene-d8 - SS		99		84-127 80-117		-
	Toluciic-uo - Be		100		00 117		
	,	Interna	l Standard	Standard			
		Fluorobenzene					
		Chlorobenzene-d5 1,4-Dichlorobenzen		100000000000000000000000000000000000000			
		1,4-13:01101000112011	10-4-				
		*					
Comments:							

Analytical Method: SW8260		AAB#	: D0602066		
Lab Name: Columbia Analytical Serv	vices/Redding	-			
Concentration Units (ug/L or mg/kg):	UG/L	M	Iethod Blank 1D:	M1220W01	
Lab Sample ID: M1220W01					
Initial Calibration ID: 12/05/06MSM					

Analyte	MDL	Method Blank	RL	Q
Dichlorodifluoromethane	0.36	ND	5.0	
Chloromethane	0.23	ND	5.0	
Vinyl chloride	0.22	ND	1.0	
Bromomethane	0.27	ND	1.0	
Chloroethane	0.20	ND	5.0	
Trichlorofluoromethane	0.14	ND	5.0	
1,1-Dichloroethene	0.19	ND	2.0	
Acetone	1.0	ND	20	
Carbon disulfide	0.11	ND	5.0	
Methylene chloride	0.15	ND	5.0	
Iodomethane	0.20	ND	10	
trans-1,2-Dichloroethene	0.16	ND	2.0	
Tert-butylmethylether	0.17	ND	1.0	
1,1-Dichloroethane	0.12	ND	2.0	
Vinyl acetate	0.84	ND	25	
2,2-Dichloropropane	0.33	ND	2.0	
cis-1,2-Dichloroethene	0.17	ND	2.0	-
2-Butanone	0.90	ND	10	
Bromochloromethane	0.25	ND	5.0	
Chloroform	0.14	ND	2.0	
1,1,1-Trichloroethane	0.14	ND	2.0	
1,1-Dichloropropene	0.18	ND	2.0	
Carbon tetrachloride	0.18	ND	2.0	
Benzene	0.12	ND	1.0	
1,2-Dichloroethane	0.18	ND	1.0	
Trichloroethene	0.10	ND	1.0	
1,2-Dichloropropane	0.17	ND	2.0	
Dibromomethane	0.18	ND	2.0	
Bromodichloromethane	0.17	ND	1.0	
cis-1,3-Dichloropropene	0.13	ND	2.0	
4-methyl-2-pentanone	0.85	ND	10	
Toluene	0.14	ND	2.0	
trans-1,3-Dichloropropene	0.19	ND	2.0	

Comments:			

#### ORGANIC ANALYSES DATA SHEET 6 BLANKS

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1220W01
Lab Sample ID: M1220W01	
Initial Calibration ID: 12/05/06MSM	

Analyte	MDL	Method Blank	RL	Q
1,1,2-Trichloroethane	0.22	ND	1.0	
Tetrachloroethene	0.22	ND	1.0	
1,3-Dichloropropane	0.11	ND	2.0	
2-Hexanone	0.58	ND	10	
Dibromochloromethane	0.15	ND	2.0	
1,2-Dibromoethane	0.15	ND	2.0	
Chlorobenzene	0.15	ND	1.0	
1,1,1,2-Tetrachloroethane	0.23	ND	5.0	
Ethylbenzene	0.15	ND	2.0	
Xylene (total)	0.14	ND	10	
Styrene	0.16	ND	2.0	
Bromoform	0.18	ND	5.0	
Isopropylbenzene	0.17	ND	2.0	
1,1,2,2-Tetrachloroethane	0.17	ND	1.0	
Bromobenzene	0.17	ND	5.0	
1,2,3-Trichloropropane	0.20	ND	10	
n-Propylbenzene	0.13	ND	2.0	
2-Chlorotoluene	0.16	ND	5.0	
1,3,5-Trimethylbenzene	0.15	ND	2.0	
4-Chlorotoluene	0.16	ND	5.0	
tert-Butylbenzene	0.18	ND	5.0	
1,2,4-Trimethylbenzene	0.13	ND	2.0	
sec-Butylbenzene	0.17	ND	5.0	
1,3-Dichlorobenzene	0.11	ND	1.0	
p-Isopropyltoluene	0.10	ND	2.0	
1,4-Dichlorobenzene	0.11	ND	1.0	
n-Butylbenzene	0.33	ND	5.0	
1,2-Dichlorobenzene	0.14	ND	1.0	
1,2-Dibromo-3-chloropropane	0.81	ND	5.0	
1,2,4-Trichlorobenzene	0.36	ND	5.0	
Hexachlorobutadiene	0.60	ND	1.0	
Naphthalene	0.29	ND	2.0	
1,2,3-Trichlorobenzene	0.37	ND	5.0	

Comments:				

### ORGANIC ANALYSES DATA SHEET 6 BLANKS

Analytical	Method: SW8260	AAB #:I	D0602066		
Lab Name:	Columbia Analytical Services/Reddi	ng			
Concentrat	ion Units (ug/L or mg/kg): UG/L	Metho	od Blank ID: M1220W	701	
Lab Sample	e ID: M1220W01	:		-	
	pration ID: <u>12/05/06MSM</u>				
		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
	Analyte	MDL	Method Blank	RL .	Q
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	Surrogate	Recovery	Control Limits	Qualifier	
	4-Bromofluorobenzene - SS	92	82-124		]
	Dibromofluoromethane - SS	90	84-127	and the second s	-
	Toluene-d8 - SS	89	80-117		
i	Interne	l Standard	Qualifier		_
	Fluorobenzene	ii Stanuaru	Quainter		
	Chlorobenzene-d5				
	1,4-Dichlorobenzer	ne-d4			
Comments:				-	o bosson y ee
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Analytical Method:	SW8260	AAB #:	D0602066	
				•

Lab Name: Columbia Analytical Services/Redding

LCS ID: M1218W01LCS Concentration Units (ug/L or mg/kg): UG/L

Date Extracted: \_\_\_\_\_ Date Analyzed: 12/18/06

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	12.1	121	27-158	
Chloromethane	10.0	10.8	108	51-137	
Vinyl chloride	10.0	10.7	107	57-137	
Bromomethane	10.0	11.5	115	44-156	
Chloroethane	10.0	11.3	113	60-140	
Trichlorofluoromethane	10.0	12.3	123	54-146	
1,1-Dichloroethene	10.0	11.0	110	70-130	
Acetone	50.0	43.4	87	55-137	
Carbon disulfide	10.0	10.0	100	50-127	
Methylene chloride	10.0	9.8	98	73-121	
Iodomethane	10.0	9.6	96	50-150	E4
trans-1,2-Dichloroethene	10.0	9.8	- 98	74-124	
Tert-butylmethylether	10.0	10.0	100	75-119	
1,1-Dichloroethane	10.0	9.9	99	78-121	
Vinyl acetate	10.0	11.1	111	52-129	E4
2,2-Dichloropropane	10.0	9.9	99	61-137	
cis-1,2-Dichloroethene	10.0	10.3	103	80-118	
2-Butanone	50.0	47.0	94	76-122	
Bromochloromethane	10.0	10.3	103	82-118	
Chloroform	10.0	10.1	101	73-125	
1,1,1-Trichloroethane	10.0	10.0	100	76-124	
1,1-Dichloropropene	10.0	10.2	102	80-119	
Carbon tetrachloride	10.0	10.7	107	68-135	
Benzene	10.0	10.2	102	81-119	
1,2-Dichloroethane	10.0	9.8	98	75-122	
Trichloroethene	10.0	9.9	99	79-118	
1,2-Dichloropropane	10.0	9.6	96	82-115	
Dibromomethane	10.0	10.1	101	84-116	
Bromodichloromethane	10.0	10.5	105	81-122	
cis-1,3-Dichloropropene	10.0	10.3	103	78-118	
4-methyl-2-pentanone	50.0	49.4	99	81-127	
Toluene	10.0	10.0	100	83-116	
trans-1,3-Dichloropropene	10.0	10.5	105	73-122	

Comments:	•			
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Analytical Method: SW8260	AAB #: <u>D0602066</u>	- de de condicione
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1218W01LCS	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/18/06	
1 1 1 0 11		

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q.
1,1,2-Trichloroethane	10.0	10.2	102	83-120	
Tetrachloroethene	10.0	10.7	107	82-118	
1,3-Dichloropropane	10.0	10.3	103	82-119	
2-Hexanone	50.0	48.9	98	81-130	
Dibromochloromethane	10.0	11.3	113	79-124	
1,2-Dibromoethane	10.0	10.6	106	82-116	
Chlorobenzene	10.0	10.3	103	86-114	
1,1,1,2-Tetrachloroethane	10.0	10.7	107	79-122	
Ethylbenzene	10.0	10.4	104	86-116	
Xylene (total)	30.0	31.1	104	85-117	
Styrene	10.0	10.4	104	84-119	
Bromoform	10.0	11.0	110	71-133	
Isopropylbenzene	10.0	10.7	107	77-117	
1,1,2,2-Tetrachloroethane	10.0	10.7	107	80-117	
Bromobenzene	10.0	10.5	105	84-120	
1,2,3-Trichloropropane	10.0	10.5	105	81-122	
n-Propylbenzene	10.0	10.5	105	87-117	
2-Chlorotoluene	10.0	10.6	106	87-119	
1,3,5-Trimethylbenzene	10.0	9.8	98	83-120	
4-Chlorotoluene	10.0	10.4	104	86-118	
tert-Butylbenzene	10.0	10.7	107	82-122	
1,2,4-Trimethylbenzene	10.0	10.4	104	86-121	
sec-Butylbenzene	10.0	10.8	108	84-128	
1,3-Dichlorobenzene	10.0	10.4	104	85-119	
p-Isopropyltoluene	10.0	10.3	103	84-121	
1,4-Dichlorobenzene	10.0	10.3	103	84-118	
n-Butylbenzene	10.0	9.6	96	81-123	
1,2-Dichlorobenzene	10.0	10.3	103	85-117	
1,2-Dibromo-3-chloropropane	40.0	40.8	102	67-121	
1,2,4-Trichlorobenzene	10.0	9.6	96	69-128	
Hexachlorobutadiene	10.0	10.0	100	71-135	
Naphthalene	10.0	9.9	99	60-131	
1,2,3-Trichlorobenzene	10.0	9.6	96	69-130	

Comments:		

Analytical Metho	d: SW8260	AAE	8 #: <u>D0602</u>	066	<del></del>	
Lab Name: Col	umbia Analytical Services/Re	edding				
LCS ID: <u>M1218</u>	W01LCS Conc	centration Units (	ug/L or mg/	/kg): <u>UG/L</u>		
Date Extracted: _	Date A	nalyzed: 12/18	/06	_		
	ID: 12/05/06MSM					
	Analyte	Expected	Found	%R	Control Limits	Q
	- Line Albertan - Line Alberta					
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	Surrogate	Recover	y Co	ontrol Limits	Qualifier	
	mofluorobenzene - SS	105		82-124		
	mofluoromethane - SS ne-d8 - SS	102		84-127 80-117		
Toluci	iic-uo - 55	102		00-117		
L						
		nal Standard		Qualifier		
	Fluorobenzene Chlorobenzene-d	5				
	1,4-Dichlorobenz					
Comments:						
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Analytical Method: SW8	260	AAB#: <u>D0602066</u>	
Lab Name: Columbia A	nalytical Services/Redding		
LCS ID: M1218W01LC	SD Concentration U	Jnits (ug/L or mg/kg): UG/L	

Date Extracted: \_\_\_\_\_ Date Analyzed: 12/18/06

Initial Calibration ID: <u>12/05/06MSM</u>

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	11.5	115	27-158	
Chloromethane	10.0	10.4	104	51-137	
Vinyl chloride	10.0	10.4	104	57-137	
Bromomethane	10.0	11.2	112	44-156	
Chloroethane	10.0	10.6	106	60-140	
Trichlorofluoromethane	10.0	12.1	121	54-146	
1,1-Dichloroethene	10.0	11.1	111	70-130	
Acetone	50.0	43.4	87	55-137	
Carbon disulfide	10.0	9.9	99	50-127	
Methylene chloride	10.0	9.6	96	73-121	
Iodomethane	10.0	9.4	94	50-150	E4
trans-1,2-Dichloroethene	10.0	9.8	98	74-124	
Tert-butylmethylether	10.0	9.8	98	75-119	
1,1-Dichloroethane	10.0	9.8	98	78-121	-
Vinyl acetate	10.0	10.9	109	52-129	E4
2,2-Dichloropropane	10.0	9.8	98	61-137	
cis-1,2-Dichloroethene	10.0	10.4	104	80-118	
2-Butanone	50.0	46.9	94	76-122	
Bromochloromethane	10.0	9.9	99	82-118	
Chloroform	10.0	10.0	100	73-125	
1,1,1-Trichloroethane	10.0	9.9	99	76-124	
1,1-Dichloropropene	10.0	9.9	99	80-119	
Carbon tetrachloride	10.0	10.3	103	68-135	
Benzene	10.0	10.1	101	81-119	
1,2-Dichloroethane	10.0	9.5	95	75-122	
Trichloroethene	10.0	9.9	99	79-118	
1,2-Dichloropropane	10.0	9.7	97	82-115	
Dibromomethane	10.0	9.9	99	84-116	
Bromodichloromethane	10.0	10.2	102	81-122	
cis-1,3-Dichloropropene	10.0	10.3	103	78-118	
4-methyl-2-pentanone	50.0	49.2	98	81-127	
Toluene	10.0	10.0	100	83-116	
trans-1,3-Dichloropropene	10.0	10.0	100	73-122	

Comments:			

Analytical Method: SW8260	AAB #: D0602066	
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1218W01LCSD	Concentration Units (ug/L or mg/kg): UG/L	
Date Extracted:	Date Analyzed: 12/18/06	
Initial Calibration ID: 12/05/06MSM		

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	10.0	100	83-120	
Tetrachloroethene	10.0	10.4	104	82-118	
1,3-Dichloropropane	10.0	9.8	98	82-119	
2-Hexanone	50.0	48.4	97	81-130	
Dibromochloromethane	10.0	10.9	109	79-124	
1,2-Dibromoethane	10.0	10.2	102	82-116	
Chlorobenzene	10.0	10.2	102	86-114	
1,1,1,2-Tetrachloroethane	10.0	10.3	103	79-122	
Ethylbenzene	10.0	10.4	104	86-116	
Xylene (total)	30.0	30.9	103	85-117	
Styrene	10.0	10.3	103	84-119	
Bromoform	10.0	10.3	103	71-133	***************************************
Isopropylbenzene	10.0	10.6	106	77-117	
1,1,2,2-Tetrachloroethane	10.0	9.9	99	80-117	
Bromobenzene	10.0	10.2	102	84-120	
1,2,3-Trichloropropane	10.0	9.7	97	81-122	E4
n-Propylbenzene	10.0	10.4	104	87-117	
2-Chlorotoluene	10.0	10.3	103	87-119	
1,3,5-Trimethylbenzene	10.0	10.4	104	83-120	
4-Chlorotoluene	10.0	10.4	104	86-118	
tert-Butylbenzene	10.0	8.9	89	82-122	
1,2,4-Trimethylbenzene	10.0	10.4	104	86-121	
sec-Butylbenzene	10.0	10.9	109	84-128	
1,3-Dichlorobenzene	10.0	10.2	102	85-119	
p-Isopropyltoluene	10.0	10.4	104	84-121	
1,4-Dichlorobenzene	10.0	10.2	102	84-118	
n-Butylbenzene	10.0	10.1	101	81-123	
1,2-Dichlorobenzene	10.0	10.2	102	85-117	
1,2-Dibromo-3-chloropropane	40.0	39.2	98	67-121	
1,2,4-Trichlorobenzene	10.0	10.4	104	69-128	
Hexachlorobutadiene	10.0	10.5	105	71-135	
Naphthalene	10.0	10.7	107	60-131	
1,2,3-Trichlorobenzene	10.0	10.6	106	69-130	

Comments:	
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Analytica	al Method: SW82	60	AAE	3#: <u>D060</u>	02066		
Lab Nam	e: Columbia An	alytical Services/Red	ding				
LCS ID:	M1218W01LCS	D Conce	ntration Units (	— [ug/L or m	ıg/kg): UG/L		
	acted:		alyzed: 12/18				
	libration ID: 12/0						
		-			0/7		
	Analyt	e	Expected	Found	%R	Control Limits	Q
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	Sur	rogate	Recovery	v (	Control Limits	Qualifier	
	4-Bromofluorob		102		82-124	2	
	Dibromofluoron		101		84-127		
	Toluene-d8 - SS		102		80-117		
			l Standard	\$4.	Qualifier		
		Fluorobenzene Chlorobenzene-d5	The same same same				
		1,4-Dichlorobenzen	ne-d4				
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Comments	s:						
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Analytical Method: SW8260	AAB #: <u>D0602066</u>
Lab Name: Columbia Analytical	Services/Redding
LCS ID: M1220W01LCS	Concentration Units (ug/L or mg/kg): UG/L
Date Extracted:	Date Analyzed: 12/20/06

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	· Q
Dichlorodifluoromethane	10.0	12.5	125	27-158	
Chloromethane	10.0	10.8	108	51-137	
Vinyl chloride	10.0	10.8	108	57-137	
Bromomethane	10.0	11.1	111	44-156	
Chloroethane	10.0	11.0	110	60-140	
Trichlorofluoromethane	10.0	12.8	128	54-146	
1,1-Dichloroethene	10.0	11.2	112	70-130	
Acetone	50.0	49.0	98	55-137	
Carbon disulfide	10.0	10.3	103	50-127	
Methylene chloride	10.0	10.1	101	73-121	
Iodomethane	10.0	10.0	100	50-150	
trans-1,2-Dichloroethene	10.0	10.1	101	74-124	
Tert-butylmethylether	10.0	10.4	104	75-119	
1,1-Dichloroethane	10.0	9.9	99	78-121	
Vinyl acetate	10.0	11.7	117	52-129	E4
2,2-Dichloropropane	10.0	10.4	104	61-137	
cis-1,2-Dichloroethene	10.0	10.5	105	80-118	
2-Butanone	50.0	50.6	101	76-122	
Bromochloromethane	10.0	10.3	103	82-118	
Chloroform	10.0	10.0	100	73-125	
1,1,1-Trichloroethane	10.0	10.0	100	76-124	
1,1-Dichloropropene	10.0	10.3	103	80-119	
Carbon tetrachloride	10.0	10.6	106	68-135	
Benzene	10.0	10.4	104	81-119	
1,2-Dichloroethane	10.0	10.2	102	75-122	
Trichloroethene	10.0	10.2	102	79-118	
1,2-Dichloropropane	10.0	9.9	99	82-115	
Dibromomethane	10.0	10.4	104	84-116	
Bromodichloromethane	10.0	10.6	106	81-122	
cis-1,3-Dichloropropene	10.0	10.7	107	78-118	
4-methyl-2-pentanone	50.0	51.9	104	81-127	
Toluene	10.0	10.2	102	83-116	
trans-1,3-Dichloropropene	10.0	10.6	106	73-122	

Comments:			
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Analytical Method: SW8260	AAB #: <u>D0602066</u>
Lab Name: Columbia Analytical Ser	vices/Redding
LCS ID: M1220W01LCS	Concentration Units (ug/L or mg/kg): UG/L
Data Extracted	Date Analyzed: 12/20/06

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	10.4	104	83-120	
Tetrachloroethene	10.0	11.0	110	82-118	
1,3-Dichloropropane	10.0	10.5	105	82-119	
2-Hexanone	50.0	51.2	102	81-130	
Dibromochloromethane	10.0	11.2	112	79-124	
1,2-Dibromoethane	10.0	10.7	107	82-116	
Chlorobenzene	10.0	10.5	105	86-114	
1,1,1,2-Tetrachloroethane	10.0	10.7	107	79-122	
Ethylbenzene	10.0	10.6	106	86-116	
Xylene (total)	30.0	31.6	105	85-117	
Styrene	10.0	10.8	108	84-119	
Bromoform	10.0	10.7	107	71-133	
Isopropylbenzene	10.0	10.9	109	77-117	
1,1,2,2-Tetrachloroethane	10.0	11.0	110	80-117	
Bromobenzene	10.0	11.2	112	84-120	
1,2,3-Trichloropropane	10.0	10.9	109	81-122	
n-Propylbenzene	10.0	11.1	111	87-117	
2-Chlorotoluene	10.0	11.0	110	87-119	
1,3,5-Trimethylbenzene	10.0	10.9	109	83-120	
4-Chlorotoluene	10.0	10.9	109	86-118	
tert-Butylbenzene	10.0	11.0	110	82-122	
1,2,4-Trimethylbenzene	10.0	10.8	108	86-121	
sec-Butylbenzene	10.0	11.2	112	84-128	
1,3-Dichlorobenzene	10.0	10.8	108	85-119	
p-Isopropyltoluene	10.0	10.6	106	84-121	
1,4-Dichlorobenzene	10.0	10.7	107	84-118	
n-Butylbenzene	10.0	10.1	101	81-123	
1,2-Dichlorobenzene	10.0	10.8	108	85-117	
1,2-Dibromo-3-chloropropane	40.0	42.6	106	67-121	
1,2,4-Trichlorobenzene	10.0	10.4	104	69-128	
Hexachlorobutadiene	10.0	10.0	100	71-135	
Naphthalene	10.0	10.9	109	60-131	
1,2,3-Trichlorobenzene	10.0	10.5	105	69-130	

Comments:			

Analytica	1 Method: SW82	60	AAB	#: <u>D0602</u>	2066	<u></u>		
Lab Name: Columbia Analytical Services/Redding								
LCS ID:	M1220W01LCS	Conce	ntration Units (	ug/L or mg	/kg): <u>UG/L</u>			
		Date An						
			,					
Initial Calibration ID: 12/05/06MSM								
<u> </u>	Analyte		Expected	Found	%R	Control Limits	Q	
						4.640004		
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		AND AND AND AND AND AND AND AND AND AND						
					17: :/-	0-1:6		
	4-Bromofluorob	rogate	Recovery	y C	ontrol Limits 82-124	Qualifier		
	Dibromofluoron		103		84-127			
	Toluene-d8 - SS		101		80-117			
						<u>l</u>		
	Internal Standard				Qualifier			
	Fluorobenzene							
	Chlorobenzene-d5 1,4-Dichlorobenzene-d4							
		1,4-Dichlorobenzer	1e-a4					
Comments	۲۰							
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Analytical M	Aethod: SW8260	AAB #: <u>D0602066</u>	
Lab Name:	Columbia Analytical Services/Redding		

LCS ID: M1220W01LCSD Concentration Units (ug/L or mg/kg): UG/L

Date Extracted: \_\_\_\_\_ Date Analyzed: \_12/20/06

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	11.7	117	27-158	
Chloromethane	10.0	10.2	102	51-137	
Vinyl chloride	10.0	10.4	104	57-137	
Bromomethane	10.0	10.6	106	44-156	
Chloroethane	10.0	10.5	105	60-140	
Trichlorofluoromethane	10.0	11.6	116	54-146	
1,1-Dichloroethene	10.0	10.8	108	70-130	
Acetone	50.0	47.1	94	55-137	
Carbon disulfide	10.0	. 9.8	98	50-127	
Methylene chloride	10.0	9.8	98	73-121	-
Iodomethane	10.0	9.4	94	50-150	E4
trans-1,2-Dichloroethene	10.0	9.6	96	74-124	
Tert-butylmethylether	10.0	9.9	99	75-119	
1,1-Dichloroethane	10.0	9.7	97	78-121	
Vinyl acetate	10.0	11.0	110	52-129	E4
2,2-Dichloropropane	10.0	9.8	9.8	61-137	
cis-1,2-Dichloroethene	10.0	10.3	103	80-118	
2-Butanone	50.0	47.0	94	76-122	
Bromochloromethane	10.0	10.0	100	82-118	
Chloroform	10.0	9.6	96	73-125	
1,1,1-Trichloroethane	10.0	9.6	96	76-124	
1,1-Dichloropropene	10.0	10.0	100	80-119	
Carbon tetrachloride	10.0	10.2	102	68-135	
Benzene	10.0	10.2	102	81-119	
1,2-Dichloroethane	10.0	9.6	96	75-122	
Trichloroethene	10.0	10.0	100	79-118	
1,2-Dichloropropane	10.0	9.5	95	82-115	-
Dibromomethane	10.0	9.9	99	84-116	
Bromodichloromethane	10.0	10.0	100	81-122	
cis-1,3-Dichloropropene	10.0	10.2	102	78-118	
4-methyl-2-pentanone	50.0	48.8	98	81-127	
Toluene	10.0	10.0	100	83-116	- 100-1
trans-1,3-Dichloropropene	10.0	10.1	101	73-122	

Comments:		
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Analytical Method: SW8260	AAB #: <u>D0602066</u>		-	
Lab Name: Columbia Analytical Ser	vices/Redding			
LCS ID: M1220W01LCSD	Concentration Units (ug/L or mg/kg):	UG/L		
Date Extracted:	Date Analyzed: 12/20/06			

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	10.1	101	83-120	
Tetrachloroethene	10.0	10.6	106	82-118	
1,3-Dichloropropane	10.0	10.1	101	82-119	
2-Hexanone	50.0	47.7	95	81-130	
Dibromochloromethane	10.0	10.6	106	79-124	
1,2-Dibromoethane	10.0	10.4	104	82-116	
Chlorobenzene	10.0	10.3	103	86-114	-
1,1,1,2-Tetrachloroethane	10.0	10.2	102	79-122	
Ethylbenzene	10.0	10.4	104	86-116	
Xylene (total)	30.0	30.9	103	85-117	
Styrene	10.0	10.3	103	84-119	
Bromoform	10.0	10.0	100	71-133	
Isopropylbenzene	10.0	10.6	106	77-117	
1,1,2,2-Tetrachloroethane	10.0	10.3	103	80-117	
Bromobenzene	10.0	10.3	103	84-120	
1,2,3-Trichloropropane	10.0	9.8	98	81-122	E4
n-Propylbenzene	10.0	10.4	104	87-117	
2-Chlorotoluene	10.0	10.4	104	87-119	
1,3,5-Trimethylbenzene	10.0	10.4	104	83-120	
4-Chlorotoluene	10.0	10.3	103	86-118	
tert-Butylbenzene	10.0	10.5	105	82-122	
1,2,4-Trimethylbenzene	10.0	10.4	104	86-121	
sec-Butylbenzene	10.0	10.8	108	84-128	
1,3-Dichlorobenzene	10.0	10.2	102	85-119	
p-Isopropyltoluene	10.0	10.4	104	84-121	
1,4-Dichlorobenzene	10.0	10.3	103	84-118	· · · · · · · · · · · · · · · · · · ·
n-Butylbenzene	10.0	9.8	98	81-123	
1,2-Dichlorobenzene	10.0	10.2	102	85-117	
1,2-Dibromo-3-chloropropane	40.0	38.3	96	67-121	
1,2,4-Trichlorobenzene	10.0	10.0	100	69-128	
Hexachlorobutadiene	10.0	10.3	103	71-135	-20000000000000000000000000000000000000
Naphthalene	10.0	10.4	104	60-131	
1,2,3-Trichlorobenzene	10.0	9.8	98	69-130	

Comments:		

Lab Name   Columbia Analytical Services/Redding	Analytica	l Method: SW82	260	AAI	3 #: _D	0602	066	_	
Date Extracted:	Lab Nam	e: Columbia An	alytical Services/Redo	ding					
Date Extracted: Date Analyzed:					— (ug/L c	or mg/	kg): UG/L		
Analyte   Expected   Found   %R   Control Limits   Q									
Surrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 103 82-124 Dibromofluoromethane - SS 100 84-127 Toluene-d8 - SS 99 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4				-			<del>-</del>		
Surrogate   Recovery   Control Limits   Qualifier		Analyt	e	Expected	Fou	ınd	%R	Control Limits	Q
Surrogate   Recovery   Control Limits   Qualifier				-	····				
Surrogate   Recovery   Control Limits   Qualifier									
4-Bromofluorobenzene - SS         103         82-124           Dibromofluoromethane - SS         100         84-127           Toluene-d8 - SS         99         80-117           Internal Standard Qualifier           Fluorobenzene         Chlorobenzene-d5           1,4-Dichlorobenzene-d4         1,4-Dichlorobenzene-d4									
4-Bromofluorobenzene - SS         103         82-124           Dibromofluoromethane - SS         100         84-127           Toluene-d8 - SS         99         80-117           Internal Standard Qualifier           Fluorobenzene         Chlorobenzene-d5           1,4-Dichlorobenzene-d4         1,4-Dichlorobenzene-d4							:		
4-Bromofluorobenzene - SS         103         82-124           Dibromofluoromethane - SS         100         84-127           Toluene-d8 - SS         99         80-117           Internal Standard Qualifier           Fluorobenzene         Chlorobenzene-d5           1,4-Dichlorobenzene-d4         1,4-Dichlorobenzene-d4			AMERICA						
4-Bromofluorobenzene - SS         103         82-124           Dibromofluoromethane - SS         100         84-127           Toluene-d8 - SS         99         80-117           Internal Standard Qualifier           Fluorobenzene         Chlorobenzene-d5           1,4-Dichlorobenzene-d4         1,4-Dichlorobenzene-d4	,								
4-Bromofluorobenzene - SS         103         82-124           Dibromofluoromethane - SS         100         84-127           Toluene-d8 - SS         99         80-117           Internal Standard Qualifier           Fluorobenzene         Chlorobenzene-d5           1,4-Dichlorobenzene-d4         1,4-Dichlorobenzene-d4			The second secon						
4-Bromofluorobenzene - SS 103 82-124 Dibromofluoromethane - SS 100 84-127 Toluene-d8 - SS 99 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4									
4-Bromofluorobenzene - SS         103         82-124           Dibromofluoromethane - SS         100         84-127           Toluene-d8 - SS         99         80-117           Internal Standard Qualifier           Fluorobenzene         Chlorobenzene-d5           1,4-Dichlorobenzene-d4         1,4-Dichlorobenzene-d4		U A CONTROLLE CO	0.0000000000000000000000000000000000000			***************************************			
4-Bromofluorobenzene - SS         103         82-124           Dibromofluoromethane - SS         100         84-127           Toluene-d8 - SS         99         80-117           Internal Standard Qualifier           Fluorobenzene         Chlorobenzene-d5           1,4-Dichlorobenzene-d4         1,4-Dichlorobenzene-d4		228.000.00	, J. W. W. W. W. W. W. W. W. W. W. W. W. W.						
4-Bromofluorobenzene - SS 103 82-124 Dibromofluoromethane - SS 100 84-127 Toluene-d8 - SS 99 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4									
4-Bromofluorobenzene - SS         103         82-124           Dibromofluoromethane - SS         100         84-127           Toluene-d8 - SS         99         80-117           Internal Standard Qualifier           Fluorobenzene         Chlorobenzene-d5           1,4-Dichlorobenzene-d4         1,4-Dichlorobenzene-d4									
4-Bromofluorobenzene - SS         103         82-124           Dibromofluoromethane - SS         100         84-127           Toluene-d8 - SS         99         80-117           Internal Standard Qualifier           Fluorobenzene         Chlorobenzene-d5           1,4-Dichlorobenzene-d4         1,4-Dichlorobenzene-d4									
4-Bromofluorobenzene - SS 103 82-124 Dibromofluoromethane - SS 100 84-127 Toluene-d8 - SS 99 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4									
4-Bromofluorobenzene - SS 103 82-124 Dibromofluoromethane - SS 100 84-127 Toluene-d8 - SS 99 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4									
Dibromofluoromethane - SS 100 84-127 Toluene-d8 - SS 99 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4		Sui	rrogate	Recover	y	Co	ntrol Limits	Qualifier	
Toluene-d8 - SS 99 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4									
Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4									
Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4		Toluene-d8 - SS		99			80-117		
Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4									
Chlorobenzene-d5 1,4-Dichlorobenzene-d4				l Standard			Qualifier		
1,4-Dichlorobenzene-d4									
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Analytical Method: SW8260	AAB #: <u>D0602060</u>	5
Lab Name: Columbia Analytical Services/Red	lding	
Concentration Units (ug/L or mg/kg): UG/L		%Solids:
Parent Field Sample ID: M1218W01	BS ID: M1218W01LCS	BSD ID: M1218W01LCSD

Analyte	Parent Sample	Spike	Spiked Sample	%R	Duplicat Spike	%R	%RPD		Control	Q
	Result	Added	Result		Sample Result			Limits %RPD	Limits %R	
Dichlorodifluoromethane		10.0	12.1	121	11.5	115	5	20	27-158	
Chloromethane		10.0	10.8	108	10.4	104	4	20	51-137	
Vinyl chloride		10.0	10.7	107	10.4	104	3	20	57-137	
Bromomethane		10.0	11.5	115	11.2	112	3	20	44-156	
Chloroethane		10.0	11.3	113	10.6	106	6	20	60-140	
Trichlorofluoromethane		10.0	12.3	123	12.1	121	2	20	54-146	
1,1-Dichloroethene		10.0	11.0	110	11.1	111	1	20	70-130	
Acetone		50.0	43.4	87	43.4	87	0	20	55-137	
Carbon disulfide		10.0	10.0	100	9.9	99	1	20	50-127	
Methylene chloride		10.0	9.8	98	9.6	96	2	20	73-121	
Iodomethane		10.0	9.6	96	9.4	94	2	20	50-150	<b>E4</b>
trans-1,2-Dichloroethene		10.0	9.8	98	9.8	98	. 0	20 ·	74-124	
Tert-butylmethylether		10.0	10.0	100	9.8	98	2.	20	75-119	
1,1-Dichloroethane	:	10.0	9.9	99	9.8	98	1	20	78-121	
Vinyl acetate		10.0	11.1	111	10.9	109	2	20	52-129	E4
2,2-Dichloropropane		10.0	9.9	99	9.8	98	1	20	61-137	
cis-1,2-Dichloroethene		10.0	10.3	103	10.4	104	1	20	80-118	
2-Butanone		50.0	47.0	94	46.9	94	0	20	76-122	
Bromochloromethane		10.0	10.3	103	9.9	99	4	20	82-118	
Chloroform		10.0	10.1	101	10.0	100	1	20	73-125	
1,1,1-Trichloroethane		10.0	10.0	100	9.9	99	1	20	76-124	
1,1-Dichloropropene		10.0	10.2	102	9.9	99	3	20	80-119	
Carbon tetrachloride		10.0	10.7	107	10.3	103	4	20	68-135	
Benzene		10.0	10.2	102	10.1	101	1	20	81-119	
1,2-Dichloroethane		10.0	9.8	98	9.5	95	3	20	75-122	
Trichloroethene		10.0	9.9	99	. 9.9	99	0	20	79-118	

Comments:			
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Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	%Solids:
Parent Field Sample ID: M1218W01 BS ID	: M1218W01LCS BSD ID: M1218W01LCSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
1,2-Dichloropropane		10.0	9.6	96	9.7	97	1	20	82-115	
Dibromomethane		10.0	10.1	101	9.9	99	2	20	84-116	
Bromodichloromethane		10.0	10.5	105	10.2	102	3	20	81-122	
cis-1,3-Dichloropropene		10.0	10.3	103	10.3	103	0	20	78-118	
4-methyl-2-pentanone		50.0	49.4	99	49.2	98	0	20	81-127	
Toluene		10.0	10.0	100	10.0	100	0	20	83-116	
trans-1,3-Dichloropropene		10.0	10.5	105	10.0	100	5	20	73-122	
1,1,2-Trichloroethane		10.0	10.2	102	10.0	100	2	20	83-120	
Tetrachloroethene		10.0	10.7	107	10.4	104	3	20	82-118	
1,3-Dichloropropane		10.0	10.3	103	9.8	98	5	20	82-119	
2-Hexanone		50.0	48.9	98	48.4	97	1	20	81-130	
Dibromochloromethane		10.0	11.3	113	10.9	109	4	20	79-124	
1,2-Dibromoethane		10.0	10.6	106	10.2	102	4	20	82-116	
Chlorobenzene		10.0	10.3	103	10.2	102	1	20	86-114	
1,1,1,2-Tetrachloroethane		10.0	10.7	107	10.3	103	4	20	79-122	
Ethylbenzene	,	. 10.0	10.4	104	10.4	104	0	20	86-116	
Xylene (total)		30.0	31.1	104	30.9	103	1	20	85-117	
Styrene		10.0	10.4	104	10.3	103	1	20	84-119	
Bromoform		10.0	11.0	110	10.3	103	6	20	71-133	
lsopropylbenzene		10.0	10.7	107	10.6	106	1	20	77-117	
1,1,2,2-Tetrachloroethane		10.0	10.7	107	9.9	99	8	20	80-117	
Bromobenzene		10.0	10.5	105	10.2	102	3	20	84-120	
1,2,3-Trichloropropane		10.0	10.5	105	9.7	97	8	20	81-122	E4
n-Propylbenzene		10.0	10.5	105	10.4	104	1	20	87-117	
2-Chlorotoluene		10.0	10.6	106	10.3	103	3	20	87-119	
1,3,5-Trimethylbenzene		10.0	9.8	98	10.4	104	6	20	83-120	

Comments:		

Analytical Method: SW826	0		,4	AAB#:	D060206	6				
Lab Name: Columbia Ana	lytical Ser	vices/Redd	ling							
Concentration Units (ug/L or	mg/kg):	UG/L				%Soli	ds:			
Parent Field Sample ID: M1	218W01		BS ID:	M1218	W01LCS		BSD II	D: <u>M1218</u>	BW01LCSI	<u> </u>
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Chlorotoluene		10.0	10.4	104	10.4	104	0	20	86-118	
-Butylbenzene		10.0	10.7	107	8.9	89	18	20	82-122	
,4-Trimethylbenzene		10.0	10.4	104	10.4	104	0	20	86-121	
-Butylbenzene		10.0	10.8	108	10.9	109	1	20	84-128	
-Dichlorobenzene		10.0	10.4	104	10.2	102	2	20	85-119	
sopropyltoluene		10.0	10.3	103	10.4	104	1	20	84-121	The street of
-Dichlorobenzene		10.0	10.3	103	10.2	102	1	20	84-118	
Butylbenzene		10.0	9.6	96	10.1	101	5	20	81-123	
-Dichlorobenzene		10.0	10.3	103	10.2	102	1	20	85-117	
-Dibromo-3-chloropropane		40.0	40.8	102	39.2	98	4	20	67-121	
4-Trichlorobenzene		10.0	9.6	96	10.4	104	8	20	69-128	
kachlorobutadiene		10.0	10.0	100	10.5	105	5	20	71-135	
ohthalene		10.0	9.9	99	10.7	107	8	20	60-131	
3-Trichlorobenzene		10.0	9.6	96	10.6	106	10	20	69-130	
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Comments:		77.1° (***)	·						-	

Analytical Method: SW8260		AAB#: <u>D0602060</u>	5
Lab Name: Columbia Analytical Services/R	edding		
Concentration Units (ug/L or mg/kg): UG/L			%Solids:
Parent Field Sample ID: M1220W01	BS ID:	M1220W01LCS	BSD ID: M1220W01LCSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Dichlorodifluoromethane		10.0	12.5	125	11.7	117	7	20	27-158	
Chloromethane		10.0	10.8	108	10.2	102	6	20	51-137	
Vinyl chloride		10.0	10.8	108	10.4	104	4	20	57-137	
Bromomethane		10.0	11.1	111	10.6	106	5	20	44-156	
Chloroethane		10.0	11.0	110	10.5	105	5	20	60-140	
Trichlorofluoromethane		10.0	12.8	128	11.6	116	10	20	54-146	
1,1-Dichloroethene		10.0	11.2	112	10.8	108	4	20	70-130	
Acetone		50.0	49.0	98	47.1	94	4	20	55-137	
Carbon disulfide		10.0	10.3	103	9.8	98	5	20	50-127	
Methylene chloride		10.0	10.1	101	9.8	98	3	20	73-121	
Iodomethane		10.0	10.0	100	9.4	94	6	20	50-150	E4
trans-1,2-Dichloroethene		10.0	10.1	101	9.6	96	5	20	74-124	
Tert-butylmethylether		10.0	10.4	104	9.9	99	5	20	75-119	
1,1-Dichloroethane		10.0	9.9	99	9.7	97	2	20	78-121	
Vinyl acetate		10.0	11.7	117	11.0	110	6	20	52-129	E4
2,2-Dichloropropane		10.0	10.4	104	9.8	98	6	20	61-137	
cis-1,2-Dichloroethene		10.0	10.5	105	10.3	103	2	20	80-118	
2-Butanone		50.0	50.6	101	47.0	94	7	20	76-122	
Bromochloromethane		10.0	10.3	103	10.0	100	3	20	82-118	
Chloroform		10.0	10.0	100	9.6	96	4	20	73-125	
1,1,1-Trichloroethane		10.0	10.0	100	9.6	96	4	20	76-124	
1,1-Dichloropropene		10.0	10.3	103	10.0	100	3	20	80-119	
Carbon tetrachloride		10.0	10.6	106	10.2	102	4	20	68-135	
Benzene		10.0	10.4	104	10.2	102	2	20	81-119	
1,2-Dichloroethane		10.0	10.2	102	9.6	96	6	20	75-122	
Trichloroethene		10.0	10.2	102	10.0	100	. 2	20	79-118	

Comments:		
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Analytical Method: SW8260	AAB#: <u>D0602066</u>
Lab Name: Columbia Analytical Services/Redding	· · · · · · · · · · · · · · · · · · ·
Concentration Units (ug/L or mg/kg): UG/L	%Solids:
Parent Field Sample ID: M1220W01 BS ID	: M1220W01LCS BSD ID: M1220W01LCSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
1,2-Dichloropropane		10.0	9.9	99	9.5	95	4	20	82-115	
Dibromomethane	-	10.0	10.4	104	9.9	99	5	20	84-116	
Bromodichloromethane		10.0	10.6	106	10.0	100	6	20	81-122	-
cis-1,3-Dichloropropene		10.0	10.7	107	10.2	102	5	20	78-118	
4-methyl-2-pentanone		50.0	51.9	104	48.8	98	6	20	81-127	
Toluene		10.0	10.2	102	10.0	100	2	20	83-116	
trans-1,3-Dichloropropene		10.0	10.6	106	10.1	. 101	5	20	73-122	
1,1,2-Trichloroethane		10.0	10.4	104	10.1	101	3	20	83-120	
Tetrachloroethene		10.0	11.0	110	10.6	106	4	20	82-118	
1,3-Dichloropropane		10.0	10.5	105	10.1	101	4	20	82-119	
2-Hexanone		50.0	51.2	102	47.7	95	7	20	81-130	
Dibromochloromethane		10.0	11.2	112	10.6	106	6	20	79-124	
1,2-Dibromoethane		10.0	10.7	107	10.4	104	3	20	82-116	
Chlorobenzene		10.0	10.5	105	10.3	103	2	20	86-114	
1,1,1,2-Tetrachloroethane		10.0	10.7	107	10.2	102	5	20	79-122	
Ethylbenzene		10.0	10.6	106	10.4	104	2	20	86-116	
Xylene (total)		30.0	31.6	105	30.9	103	2	20	85-117	
Styrene		10.0	10.8	108	10.3	103	5	20	84-119	
Bromoform		10.0	10.7	107	10.0	100	7	20	71-133	
Isopropylbenzene		10.0	10.9	109	10.6	106	3	20	77-117	
1,1,2,2-Tetrachloroethane		10.0	11.0	110	10.3	103	6	20	80-117	
Bromobenzene		10.0	11.2	112	10.3	103	8	20	84-120	
1,2,3-Trichloropropane		10.0	10.9	109	9.8	98	11	20	81-122	E4
n-Propylbenzene		10.0	11.1	111	10.4	104	6	20	87-117	
2-Chlorotoluene		10.0	11.0	.110	10.4	104	6	20	87-119	
1,3,5-Trimethylbenzene		10.0	10.9	109	10.4	104	5	20	83-120	

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Analytical Method: SW82	60		1	AAB#:	D060206	5						
Lab Name: Columbia An	alytical Serv	vices/Redd	ling									
Concentration Units (ug/L o	or mg/kg):	UG/L		-		%Soli	ids:					
Parent Field Sample ID: M	1220W01		BS ID: M1220W01LCS BSD ID						D: M1220W01LCSD			
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q		
Chlorotoluene		10.0	10.9	109	10.3	103	6	20	86-118			
rt-Butylbenzene		10.0	11.0	110	10.5	105	5	20	82-122			
2,4-Trimethylbenzene		10.0	10.8	108	10.4	104	4	20	86-121			
c-Butylbenzene		10.0	11.2	112	10.8	108	4	20	84-128			
3-Dichlorobenzene		10.0	10.8	108	10.2	102	6	20	85-119			
Isopropyltoluene		10.0	10.6	106	10.4	104	2	20	84-121			
4-Dichlorobenzene		10.0	10.7	107	10.3	103	4	20	84-118			
Butylbenzene		10.0	. 10.1	101	9.8	98	3	20	81-123			
2-Dichlorobenzene		10.0	10.8	108	10.2	102	6	20	85-117			
2-Dibromo-3-chloropropane		40.0	42.6	106	38.3	96	11	20	67-121			
2,4-Trichlorobenzene		10.0	10.4	104	10.0	100	4	20	69-128			
exachlorobutadiene		10.0	10.0	100	10.3	103	3	20	71-135			
phthalene		10.0	10.9	109	10.4	104	5	20	60-131			
2,3-Trichlorobenzene		10.0	10.5	105	9.8	98	7 .	20	69-130			
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Comments:							<u> </u>	-				

Analytical Method: SW8260	,	AAB #: <u>D0602066</u>	A-ALPA-MANIANTHAM
Lab Name: Columbia Analytical Services/Redo	ling		
Concentration Units (ug/L or mg/kg): UG/L		%Sc	olids:
Parent Field Sample ID: ASE-115A-6D2	MS ID:	ASE-115A-6D2MS	MSD ID: ASE-115A-6D2MSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Dichlorodifluoromethane		10.0	11.1	111	10.7	107	4	20	27-158	
Chloromethane	0.47	10.0	10.1	96	9.7	92	4	20	51-137	
Vinyl chloride		10.0	10.1	101	10.3	103	2	20	57-137	
Bromomethane		10.0	10.4	104	10.3	103	1	20	44-156	-
Chloroethane		10.0	10.9	109	11.2	112	3	20	60-140	
Trichlorofluoromethane		10.0	10.5	105	11.0	110	5	20	54-146	
1,1-Dichloroethene	0.57	10.0	11.3	107	11.3	107	0	20	70-130	
Acetone	2.6	50.0	43.5	82	45.4	86	4	20	55-137	
Carbon disulfide		10.0	8.3	83	8.3	83	0	20	50-127	
Methylene chloride		10.0	9.4	94	9.7	97	3	20	73-121	
Iodomethane		10.0	9.2	92	9.2	92	0	20	50-150	E4
trans-1,2-Dichloroethene		10.0	9.4	94	9.4	94	0	20	74-124	
Tert-butylmethylether	318	10.0	. 323	50	320	20	1	20	75-119	M3
1,1-Dichloroethane	0.66	10.0	10.0	93	10.0	93	0	20	78-121	
Vinyl acetate		10.0	9.5	95	9.8	98	3	20	52-129	E4
2,2-Dichloropropane		10.0	8.4	84	8.5	85	1	20	61-137	
cis-1,2-Dichloroethene	1.5	10.0	11.4	99	11.3	98	1	20	80-118	
2-Butanone		50.0	46.7	93	46.6	93	0	20	76-122	
Bromochloromethane		10.0	9.6	96	9.6	96	0	20	82-118	
Chloroform	0.35	10.0	9.6	92	9.6	92	0	20	73-125	
1,1,1-Trichloroethane		10.0	9.0	90	8.8	88	2	20	76-124	
1,1-Dichloropropene		10.0	9.9	99	9.7	97	2	20	80-119	-
Carbon tetrachloride		10.0	9.4	94	9.3	93	- 1	20	68-135	
Benzene	520	10.0	475	0	508	0	7	20	81-119	М3
1,2-Dichloroethane		10.0	11.0	110	10.8	108	2	20	75-122	
Trichloroethene	2.6	10.0	12.0	94	12.1	95	1	20	79-118	

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Analytical Method: SW8260		AAB #: <u>D0602066</u>	
Lab Name: Columbia Analytical Services/Rec	lding	national and analysis of the second s	
Concentration Units (ug/L or mg/kg): <u>UG/L</u>		%Se	olids:
Parent Field Sample ID: ASE-115A-6D2	MS ID:	ASE-115A-6D2MS	MSD ID: ASE-115A-6D2MSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
1,2-Dichloropropane		10.0	9.8	98	9.6	96	2	20	82-115	
Dibromomethane		10.0	. 9.5	95	9.6	96	1	20	84-116	
Bromodichloromethane		10.0	13.2	132	13.1	131	1	20	81-122	M1
cis-1,3-Dichloropropene		10.0	9.4	94	9.2	92	2	20	78-118	
4-methyl-2-pentanone		50.0	54.4	109	52.8	106	3	20	81-127	
Toluene	0.77	10.0	10.6	98	10.3	95	3	20	83-116	
trans-1,3-Dichloropropene		10.0	9.2	92	9.3	93	1	20	73-122	
1,1,2-Trichloroethane		10.0	9.5	95	9.4	94	1	20	83-120	
Tetrachloroethene	0.86	10.0	11.4	105	11.2	103	2	20	82-118	
1,3-Dichloropropane		10.0	9.8	98	9.8	98	0	20	82-119	
2-Hexanone		50.0	51.6	103	50.2	100	3	20	81-130	
Dibromochloromethane		10.0	9.1	91	8.8	88	3	20	79-124	
1,2-Dibromoethane		10.0	9.9	99	10.0	100	1	.20	82-116	
Chlorobenzene		10.0	10.5	105	10.3	103	2	20	86-114	
1,1,1,2-Tetrachloroethane		10.0	8.9	89	8.8	88	1	20	79-122	
Ethylbenzene	133	10.0	129	0	129	0	0	20	86-116	М3
Xylene (total)	25.8	30.0	54.5	96	53.4	92	2	20	85-117	
Styrene	0.69	10.0	9.7	90	9.6	89	1	20	84-119	
Bromoform		10.0	8.0	80	7.6	76	- 5	20	71-133	
Isopropylbenzene	56.5	10.0	63.5	70	63.4	69	0	20	77-117	М3
1,1,2,2-Tetrachloroethane		10.0	10.3	103	9.8	98	5	20	80-117	
Bromobenzene		10.0	10.4	104	10.1	101	3	20	84-120	
1,2,3-Trichloropropane		10.0	. 10.9	109	10.7	107	2	20	81-122	
n-Propylbenzene	61.4	10.0	71.5	101	70.2	88	2	20	87-117	М3
2-Chlorotoluene		10.0	10.4	104	10.0	100	4	20	87-119	
1,3,5-Trimethylbenzene	10.8	10.0	19.5	87	19.3	85	1	20	83-120	

Comments:			

Analytical Method: SW826	Analytical Method: SW8260 AAB #: D0602066									
Lab Name: Columbia Ana	lytical Serv	vices/Redo	ling							
Concentration Units (ug/L or	mg/kg):	UG/L		_		%Soli	ds:	-		
Parent Field Sample ID: AS	E-115A-6I	02	MS ID:	ASE-1	15A-6D2N				15A-6D2N	1SD_
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
4-Chlorotoluene		. 10.0	10.4	104	10.1	101	3	20	86-118	
tert-Butylbenzene	1.4	10.0	10.5	91	9.9	85	6	20	82-122	
1,2,4-Trimethylbenzene	60.1	10.0	67.2	71	66.7	66	1	20	86-121	M3
sec-Butylbenzene	9.5	10.0	19.7	102	19.0	95	4	20	84-128	
1,3-Dichlorobenzene		10.0	10.2	102	9.8	98	4	20	85-119	
p-Isopropyltoluene	3.9	10.0	13.8	99	13.1	92	5	20	84-121	
1,4-Dichlorobenzene		10.0	10.2	102	9.8	98	4	20	84-118	
n-Butylbenzene	. 5.2	10.0	15.6	104	20.5	153	27	20	81-123	M1R5
1,2-Dichlorobenzene		10.0	10.0	100	9.9	99	1	20	85-117	410000
1,2-Dibromo-3-chloropropane		40.0	35.3	. 88	35.5	89	0	20	67-121	
1,2,4-Trichlorobenzene		10.0	9.0	90	9.3	93	3	20	69-128	
Hexachlorobutadiene		10.0	7.3	73	8.1	81	10	20	71-135	
Naphthalene	119	10.0	120	10	121	20	1	20	60-131	M3
1,2,3-Trichlorobenzene		10.0	9.1	91	9.1	91	0	20	69-130	
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### ORGANIC ANALYSES DATA SHEET 9 HOLDING TIMES

Analytical M	Iethod: SW8260	AAB#:	D0602066
Lab Name:	Columbia Analytical Services/Redding		

<u> </u>			1st	Max.	1st	2nd	Max.	2nd		Max.	Time	Q
Field Sample ID	Date	Date	Date	Holding	Time	Date	Holding	Time	Date	Holding	Held	
	Collected	Received	Prepared	Time 1	Held	Prepared	Time 2	Held	Analyzed	Time A	Anal.	
TB-121406	12/13/06	12/14/06	N/A	N/A	N/A	N/A	N/A	N/A	12/20/06	14	7	
ASE-116A-6D2	12/13/06	12/14/06	N/A	N/A	N/A	N/A	N/A	N/A	12/18/06	14	5	
ASE-116A-6D2DL	12/13/06	12/14/06	N/A	N/A	N/A	N/A	N/A	N/A	12/20/06	14	7	
ASE-111A-6D2	12/13/06	12/14/06	N/A	N/A	N/A	N/A	N/A	N/A	12/18/06	14	5	
ASE-115A-6D2	12/13/06	12/14/06	N/A	N/A	N/A	N/A	N/A	N/A	12/18/06	14	5	
ASE-115A-6D2DL	12/13/06	12/14/06	N/A	N/A	N/A	N/A	N/A	N/A	12/20/06	14	7	
ASE-115A-6D2MS	12/13/06	12/14/06	N/A	N/A	N/A	N/A	N/A	N/A	12/18/06	14	5	
ASE-115A-6D2MSD	12/13/06	12/14/06	N/A	N/A	N/A	N/A	N/A	N/A	12/18/06	14	5	
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Comments:			

# ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method	1: <u>SW8</u>	260	AAB#:	D0602066	
Lab Name: Colu	ımbia Ana	alytical Services/Reddi	ng		
Instrument ID #:	MSM	DB-624			

VSTD00.5         M065370         12/05/06         1545         12/05/06         1605           VSTD001         M065371         12/05/06         1606         12/05/06         1626           VSTD005         M065372         12/05/06         1628         12/05/06         1648           VSTD010         M065373         12/05/06         1649         12/05/06         1709           VSTD020         M065374         12/05/06         1711         12/05/06         1731           VSTD050         M065375         12/05/06         1732         12/05/06         1752           VSTD100         M065376         12/05/06         1754         12/05/06         1814           VSTD150         M065377         12/05/06         1815         12/05/06         1835           QCALTSTD4         M065380         12/05/06         1815         12/05/06         1835           QCALTSTD4         M065380         12/05/06         1920         12/05/06         1844           VSTD10M         M065584         12/18/06         1141         12/18/06         1201           M1218W01LCS         M065585A         12/18/06         1141         12/18/06         1224           M1218W01         M065586	Field Sample ID/Std ID/	Laboratory	Date Analysis	Time Analysis	Date Analysis	Time Analysis
VSTD001         M065371         12/05/06         1606         12/05/06         1626           VSTD005         M065372         12/05/06         1628         12/05/06         1648           VSTD010         M065373         12/05/06         1649         12/05/06         1709           VSTD020         M065374         12/05/06         1711         12/05/06         1731           VSTD050         M065375         12/05/06         1732         12/05/06         1752           VSTD100         M065376         12/05/06         1754         12/05/06         1814           VSTD150         M065377         12/05/06         1815         12/05/06         1835           QCALTSTD4         M065380         12/05/06         1920         12/05/06         1840           VSTD10M         M065584         12/18/06         1920         12/05/06         1940           VSTD10M         M065584         12/18/06         1141         12/18/06         1201           M1218W01LCS         M065586A         12/18/06         1202         12/18/06         1222           M1218W01LCSD         M065580A         12/18/06         1328         12/18/06         1348           ASE-116A-6D2	Blank ID/QC Sample ID	File ID	Started	Started	Completed	Completed
VSTD005         M065372         12/05/06         1628         12/05/06         1648           VSTD010         M065373         12/05/06         1649         12/05/06         1709           VSTD020         M065374         12/05/06         1711         12/05/06         1731           VSTD050         M065375         12/05/06         1732         12/05/06         1752           VSTD100         M065376         12/05/06         1754         12/05/06         1814           VSTD150         M065377         12/05/06         1815         12/05/06         1835           QCALTSTD4         M065380         12/05/06         1920         12/05/06         1940           VSTD10M         M065584         12/18/06         1141         12/18/06         1201           M1218W01LCS         M065586A         12/18/06         1202         12/18/06         1222           M1218W01LCSD         M065586A         12/18/06         1328         12/18/06         1244           M1218W01         M065589A         12/18/06         1328         12/18/06         1348           ASE-116A-6D2         M065601         12/18/06         1808         12/18/06         1828           ASE-115A-6D2	VSTD00.5	M065370	12/05/06	1545	12/05/06	1605
VSTD010         M065373         12/05/06         1649         12/05/06         1709           VSTD020         M065374         12/05/06         1711         12/05/06         1731           VSTD050         M065375         12/05/06         1732         12/05/06         1752           VSTD100         M065376         12/05/06         1754         12/05/06         1814           VSTD150         M065377         12/05/06         1815         12/05/06         1835           QCALTSTD4         M065380         12/05/06         1920         12/05/06         1940           VSTD10M         M065584         12/18/06         1141         12/18/06         1201           M1218W01LCS         M065585A         12/18/06         1202         12/18/06         1222           M1218W01         M065580A         12/18/06         1328         12/18/06         1244           M1218W01         M065589A         12/18/06         1328         12/18/06         1348           ASE-116A-6D2         M065601         12/18/06         1808         12/18/06         1828           ASE-115A-6D2         M065602         12/18/06         1851         12/18/06         1849           ASE-115A-6D2MS	VSTD001	M065371	12/05/06	1606	12/05/06	1626
VSTD020         M065374         12/05/06         1711         12/05/06         1731           VSTD050         M065375         12/05/06         1732         12/05/06         1752           VSTD100         M065376         12/05/06         1754         12/05/06         1814           VSTD150         M065377         12/05/06         1815         12/05/06         1835           QCALTSTD4         M065380         12/05/06         1920         12/05/06         1940           VSTD10M         M065584         12/18/06         1141         12/18/06         1201           M1218W01LCS         M065585A         12/18/06         1202         12/18/06         1222           M1218W01LCSD         M065586A         12/18/06         1224         12/18/06         1244           M1218W01         M065589A         12/18/06         1328         12/18/06         1348           ASE-116A-6D2         M065601         12/18/06         1808         12/18/06         1828           ASE-111A-6D2         M065602         12/18/06         1829         12/18/06         1849           ASE-115A-6D2MS         M065603         12/18/06         1851         12/18/06         1932           ASE-115A-6D	VSTD005	M065372	12/05/06	1628	12/05/06	1648
VSTD050         M065375         12/05/06         1732         12/05/06         1752           VSTD100         M065376         12/05/06         1754         12/05/06         1814           VSTD150         M065377         12/05/06         1815         12/05/06         1835           QCALTSTD4         M065380         12/05/06         1920         12/05/06         1940           VSTD10M         M065584         12/18/06         1141         12/18/06         1201           M1218W01LCS         M065585A         12/18/06         1202         12/18/06         1222           M1218W01LCSD         M065586A         12/18/06         1224         12/18/06         1244           M1218W01         M065589A         12/18/06         1328         12/18/06         1348           ASE-116A-6D2         M065601         12/18/06         1808         12/18/06         1828           ASE-111A-6D2         M065602         12/18/06         1829         12/18/06         1849           ASE-115A-6D2         M065603         12/18/06         1851         12/18/06         1911           ASE-115A-6D2MS         M065604         12/18/06         1934         12/18/06         1932           ASE-11	VSTD010	M065373	12/05/06	1649	12/05/06	1709
VSTD100         M065376         12/05/06         1754         12/05/06         1814           VSTD150         M065377         12/05/06         1815         12/05/06         1835           QCALTSTD4         M065380         12/05/06         1920         12/05/06         1940           VSTD10M         M065384         12/18/06         1141         12/18/06         1201           MI218W01LCS         M065585A         12/18/06         1202         12/18/06         1222           M1218W01LCSD         M065586A         12/18/06         1224         12/18/06         1244           M1218W01         M065589A         12/18/06         1328         12/18/06         1348           ASE-116A-6D2         M065601         12/18/06         1808         12/18/06         1828           ASE-111A-6D2         M065602         12/18/06         1829         12/18/06         1849           ASE-115A-6D2         M065603         12/18/06         1851         12/18/06         1911           ASE-115A-6D2MS         M065604         12/18/06         1912         12/18/06         1932           ASE-115A-6D2MSD         M065605         12/18/06         1934         12/18/06         1934 <t< td=""><td>VSTD020</td><td>M065374</td><td>12/05/06</td><td>1711</td><td>12/05/06</td><td>1731</td></t<>	VSTD020	M065374	12/05/06	1711	12/05/06	1731
VSTD150         M065377         12/05/06         1815         12/05/06         1835           QCALTSTD4         M065380         12/05/06         1920         12/05/06         1940           VSTD10M         M065584         12/18/06         1141         12/18/06         1201           M1218W01LCS         M065585A         12/18/06         1202         12/18/06         1222           M1218W01LCSD         M065586A         12/18/06         1224         12/18/06         1244           M1218W01         M065589A         12/18/06         1328         12/18/06         1348           ASE-116A-6D2         M065601         12/18/06         1808         12/18/06         1828           ASE-111A-6D2         M065602         12/18/06         1829         12/18/06         1849           ASE-115A-6D2         M065603         12/18/06         1851         12/18/06         1911           ASE-115A-6D2MS         M065604         12/18/06         1912         12/18/06         1932           ASE-115A-6D2MSD         M065605         12/18/06         1934         12/18/06         1954           VSTD10M         M065627         12/20/06         1147         12/20/06         1207 <t< td=""><td>VSTD050</td><td>M065375</td><td>12/05/06</td><td>1732</td><td>12/05/06</td><td>1752</td></t<>	VSTD050	M065375	12/05/06	1732	12/05/06	1752
QCALTSTD4         M065380         12/05/06         1920         12/05/06         1940           VSTD10M         M065584         12/18/06         1141         12/18/06         1201           M1218W01LCS         M065585A         12/18/06         1202         12/18/06         1222           M1218W01LCSD         M065586A         12/18/06         1224         12/18/06         1244           M1218W01         M065589A         12/18/06         1328         12/18/06         1348           ASE-116A-6D2         M065601         12/18/06         1808         12/18/06         1828           ASE-111A-6D2         M065602         12/18/06         1829         12/18/06         1849           ASE-115A-6D2         M065603         12/18/06         1851         12/18/06         1911           ASE-115A-6D2MS         M065604         12/18/06         1912         12/18/06         1932           ASE-115A-6D2MSD         M065605         12/18/06         1934         12/18/06         1954           VSTD10M         M065627         12/20/06         1147         12/20/06         1207           M1220W01LCS         M065628         12/20/06         1209         12/20/06         1229	VSTD100	M065376	12/05/06	1754	12/05/06	1814
VSTD10M         M065584         12/18/06         1141         12/18/06         1201           M1218W01LCS         M065585A         12/18/06         1202         12/18/06         1222           M1218W01LCSD         M065586A         12/18/06         1224         12/18/06         1244           M1218W01         M065589A         12/18/06         1328         12/18/06         1348           ASE-116A-6D2         M065601         12/18/06         1808         12/18/06         1828           ASE-111A-6D2         M065602         12/18/06         1829         12/18/06         1849           ASE-115A-6D2         M065603         12/18/06         1851         12/18/06         1911           ASE-115A-6D2MS         M065604         12/18/06         1912         12/18/06         1932           ASE-115A-6D2MSD         M065605         12/18/06         1934         12/18/06         1954           VSTD10M         M065627         12/20/06         1147         12/20/06         1207           M1220W01LCS         M065628         12/20/06         1209         12/20/06         1229           M1220W01         M065632         12/20/06         1334         12/20/06         1354	VSTD150	M065377	12/05/06	1815	12/05/06	1835
M1218W01LCS         M065585A         12/18/06         1202         12/18/06         1222           M1218W01LCSD         M065586A         12/18/06         1224         12/18/06         1244           M1218W01         M065589A         12/18/06         1328         12/18/06         1348           ASE-116A-6D2         M065601         12/18/06         1808         12/18/06         1828           ASE-111A-6D2         M065602         12/18/06         1829         12/18/06         1849           ASE-115A-6D2         M065603         12/18/06         1851         12/18/06         1911           ASE-115A-6D2MS         M065604         12/18/06         1912         12/18/06         1932           ASE-115A-6D2MSD         M065605         12/18/06         1934         12/18/06         1954           VSTD10M         M065627         12/20/06         1147         12/20/06         1207           M1220W01LCS         M065628         12/20/06         1209         12/20/06         1229           M1220W01         M065632         12/20/06         1230         12/20/06         1354           TB-121406         M065633         12/20/06         1459         12/20/06         1519	QCALTSTD4	M065380	12/05/06	1920	12/05/06	1940
M1218W01LCSD         M065586A         12/18/06         1224         12/18/06         1244           M1218W01         M065589A         12/18/06         1328         12/18/06         1348           ASE-116A-6D2         M065601         12/18/06         1808         12/18/06         1828           ASE-111A-6D2         M065602         12/18/06         1829         12/18/06         1849           ASE-115A-6D2         M065603         12/18/06         1851         12/18/06         1911           ASE-115A-6D2MS         M065604         12/18/06         1912         12/18/06         1932           ASE-115A-6D2MSD         M065605         12/18/06         1934         12/18/06         1954           VSTD10M         M065627         12/20/06         1147         12/20/06         1207           M1220W01LCS         M065628         12/20/06         1209         12/20/06         1229           M1220W01LCSD         M065632         12/20/06         1334         12/20/06         1354           TB-121406         M065633         12/20/06         1459         12/20/06         1519           ASE-116A-6D2DL         M065635         12/20/06         1541         12/20/06         1601	VSTD10M	M065584	12/18/06	1141	12/18/06	1201
M1218W01         M065589A         12/18/06         1328         12/18/06         1348           ASE-116A-6D2         M065601         12/18/06         1808         12/18/06         1828           ASE-111A-6D2         M065602         12/18/06         1829         12/18/06         1849           ASE-115A-6D2         M065603         12/18/06         1851         12/18/06         1911           ASE-115A-6D2MS         M065604         12/18/06         1912         12/18/06         1932           ASE-115A-6D2MSD         M065605         12/18/06         1934         12/18/06         1954           VSTD10M         M065627         12/20/06         1147         12/20/06         1207           M1220W01LCS         M065628         12/20/06         1209         12/20/06         1229           M1220W01LCSD         M065629         12/20/06         1230         12/20/06         1250           M1220W01         M065632         12/20/06         1334         12/20/06         1354           TB-121406         M065635         12/20/06         1459         12/20/06         1519           ASE-116A-6D2DL         M065635         12/20/06         1541         12/20/06         1601	M1218W01LCS	M065585A	12/18/06	1202	12/18/06	1222
ASE-116A-6D2 M065601 12/18/06 1808 12/18/06 1828 ASE-111A-6D2 M065602 12/18/06 1829 12/18/06 1849 ASE-115A-6D2 M065603 12/18/06 1851 12/18/06 1911 ASE-115A-6D2MS M065604 12/18/06 1912 12/18/06 1932 ASE-115A-6D2MSD M065605 12/18/06 1934 12/18/06 1954 VSTD10M M065627 12/20/06 1147 12/20/06 1207 M1220W01LCS M065628 12/20/06 1209 12/20/06 1229 M1220W01LCSD M065629 12/20/06 1230 12/20/06 1250 M1220W01 M065632 12/20/06 1334 12/20/06 1354 TB-121406 M065633 12/20/06 1459 12/20/06 1519 ASE-116A-6D2DL M065635 12/20/06 1541 12/20/06 1601	M1218W01LCSD	M065586A	12/18/06	1224	12/18/06	1244
ASE-111A-6D2 M065602 12/18/06 1829 12/18/06 1849  ASE-115A-6D2 M065603 12/18/06 1851 12/18/06 1911  ASE-115A-6D2MS M065604 12/18/06 1912 12/18/06 1932  ASE-115A-6D2MSD M065605 12/18/06 1934 12/18/06 1954  VSTD10M M065627 12/20/06 1147 12/20/06 1207  M1220W01LCS M065628 12/20/06 1209 12/20/06 1229  M1220W01LCSD M065629 12/20/06 1230 12/20/06 1250  M1220W01 M065632 12/20/06 1334 12/20/06 1354  TB-121406 M065633 12/20/06 1459 12/20/06 1519  ASE-116A-6D2DL M065635 12/20/06 1541 12/20/06 1601	M1218W01	M065589A	12/18/06	1328	12/18/06	1348
ASE-115A-6D2 M065603 12/18/06 1851 12/18/06 1911 ASE-115A-6D2MS M065604 12/18/06 1912 12/18/06 1932 ASE-115A-6D2MSD M065605 12/18/06 1934 12/18/06 1954 VSTD10M M065627 12/20/06 1147 12/20/06 1207 M1220W01LCS M065628 12/20/06 1209 12/20/06 1229 M1220W01LCSD M065629 12/20/06 1230 12/20/06 1250 M1220W01 M065632 12/20/06 1334 12/20/06 1354 TB-121406 M065633 12/20/06 1459 12/20/06 1519 ASE-116A-6D2DL M065635 12/20/06 1541 12/20/06 1601	ASE-116A-6D2	M065601	12/18/06	1808	12/18/06	1828
ASE-115A-6D2MS M065604 12/18/06 1912 12/18/06 1932 ASE-115A-6D2MSD M065605 12/18/06 1934 12/18/06 1954 VSTD10M M065627 12/20/06 1147 12/20/06 1207 M1220W01LCS M065628 12/20/06 1209 12/20/06 1229 M1220W01LCSD M065629 12/20/06 1230 12/20/06 1250 M1220W01 M065632 12/20/06 1334 12/20/06 1354 TB-121406 M065633 12/20/06 1459 12/20/06 1519 ASE-116A-6D2DL M065635 12/20/06 1541 12/20/06 1601	ASE-111A-6D2	M065602	12/18/06	1829	12/18/06	1849
ASE-115A-6D2MSD M065605 12/18/06 1934 12/18/06 1954  VSTD10M M065627 12/20/06 1147 12/20/06 1207  M1220W01LCS M065628 12/20/06 1209 12/20/06 1229  M1220W01LCSD M065629 12/20/06 1230 12/20/06 1250  M1220W01 M065632 12/20/06 1334 12/20/06 1354  TB-121406 M065633 12/20/06 1459 12/20/06 1519  ASE-116A-6D2DL M065635 12/20/06 1541 12/20/06 1601	ASE-115A-6D2	M065603	12/18/06	1851	12/18/06	1911
VSTD10M         M065627         12/20/06         1147         12/20/06         1207           M1220W01LCS         M065628         12/20/06         1209         12/20/06         1229           M1220W01LCSD         M065629         12/20/06         1230         12/20/06         1250           M1220W01         M065632         12/20/06         1334         12/20/06         1354           TB-121406         M065633         12/20/06         1459         12/20/06         1519           ASE-116A-6D2DL         M065635         12/20/06         1541         12/20/06         1601	ASE-115A-6D2MS	M065604	12/18/06	1912	12/18/06	1932
M1220W01LCS         M065628         12/20/06         1209         12/20/06         1229           M1220W01LCSD         M065629         12/20/06         1230         12/20/06         1250           M1220W01         M065632         12/20/06         1334         12/20/06         1354           TB-121406         M065633         12/20/06         1459         12/20/06         1519           ASE-116A-6D2DL         M065635         12/20/06         1541         12/20/06         1601	ASE-115A-6D2MSD	M065605	12/18/06	1934	12/18/06	1954
M1220W01LCSD         M065629         12/20/06         1230         12/20/06         1250           M1220W01         M065632         12/20/06         1334         12/20/06         1354           TB-121406         M065633         12/20/06         1459         12/20/06         1519           ASE-116A-6D2DL         M065635         12/20/06         1541         12/20/06         1601	VSTD10M	M065627	12/20/06	1147	12/20/06	1207
M1220W01         M065632         12/20/06         1334         12/20/06         1354           TB-121406         M065633         12/20/06         1459         12/20/06         1519           ASE-116A-6D2DL         M065635         12/20/06         1541         12/20/06         1601	M1220W01LCS	M065628	12/20/06	1209	12/20/06	1229
TB-121406         M065633         12/20/06         1459         12/20/06         1519           ASE-116A-6D2DL         M065635         12/20/06         1541         12/20/06         1601	M1220W01LCSD	M065629	12/20/06	1230	12/20/06	1250
ASE-116A-6D2DL M065635 12/20/06 1541 12/20/06 1601	M1220W01	M065632	12/20/06	1334	12/20/06	1354
	TB-121406	M065633	12/20/06	1459	12/20/06	1519
ASE-115A-6D2DL M065636 12/20/06 1603 12/20/06 1623	ASE-116A-6D2DL	M065635	12/20/06	1541	12/20/06	1601
	ASE-115A-6D2DL	M065636	12/20/06	1603	12/20/06	1623

Comments:		
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# ORGANIC ANALYSES DATA SHEET APPENDIX A SURROGATE RESULTS

Analytical Method: SW8260	AAB #: <u>D0602066</u>
Lab Name: Columbia Analytical Services/Redding	
Matrix: Water	

Field/QC Sample ID	S1	S2	S3	S4	S5	S6	S7	S8	Q
M1218W01LCS	105	102	102						
M1218W01LCSD	102	101	102						
M1218W01	100	99	100						
ASE-116A-6D2	101	99	99						
ASE-111A-6D2	103	97	100						
ASE-115A-6D2	- 97	96	96						
ASE-115A-6D2MS	102	95	99						
ASE-115A-6D2MSD	99	94	97						
M1220W01LCS	109	103	101						
M1220W01LCSD	103	100	99						
M1220W01	92	90	89						
TB-121406	102	102	98						
ASE-116A-6D2DL	100	. 95	98						
ASE-115A-6D2DL	107	99	101						
-			100						
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S1:	4-Bromofluorobenzene - SS	82-124
S2:	Dibromofluoromethane - SS	84-127
S3:	Toluene-d8 - SS	80-117

Comments:		
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# HPLC POLYNUCLEAR AROMATIC HYDROCARBONS

#### ORGANIC ANALYSES DATA PACKAGE

Analytical Me	thod: SW8310	AAB #: <u>D0602066</u>
Lab Name: C	Columbia Analytical Services/Redding	
Base/Comman	d: HONEYWELL SKY HARBOR	
Project: Sk	xy Harbor	
	Field Sample ID	Lab Sample ID
	ASE-116A-6D2 ASE-116A-6D2DL ASE-115A-6D2 ASE-115A-6D2DL ASE-115A-6D2DLMS ASE-115A-6D2DLMSD ASE-115A-6D2DLMSD	D0602066-002 D0602066-002DL D0602066-004 D0602066-004DL D0602066-004DLMS D0602066-004DLMSD D0602066-004MS
	ASE-115A-6D2MSD	D0602066-004MSD
	- · · · · · · · · · · · · · · · · · · ·	
Comments:		
completeness, and in the com	for other than the conditions detailed ab	orms and conditions of the contract, both technically and for bove. Release of the data contained in this hardcopy data package tte has been authorized by the Laboratory Manager or the ature.
Signature:	St-Cl 12/23/06	Name: Sylvia Chen  Title: Scientist
4		

RDD-061222:SC:BS-1416PST-SR:D0602066-D0602066-K

# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8310	Preparatory Method:	SW3520	AAB #:
Lab Name: Columbia Analytical Services	s/Redding		
Field Sample ID: ASE-116A-6D2	Lab Sample ID:	D0602066-002	Matrix: Water
% Solids:		Initial Calibr	ation ID: 11/02/06LCI
Date Received: 12/14/06 Date	ate Extracted: 12/19/06	Date Analy	zed: 12/20/06
Concentration Units (ug/L or ug/Kg dry we	ight): UG/L	Sample Volume:	1.050 L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.048	0.50	79	1	77	
Fluorene	0.0100	0.10	0.16	1	0.33	C6
Phenanthrene	0.0066	0.10	ND	1		
Anthracene	0.0051	0.10	ND	1		
Fluoranthene	0.0074	0.10	ND	1		
Pyrene	0.0100	0.10	ND	11		
Benzo(a)anthracene	0.016	0.10	ND	1		
Chrysene	0.014	0.10	ND	1		
Benzo(b)fluoranthene	0.0084	0.10	ND	1		
Benzo(k)fluoranthene	0.011	0.10	ND	1		
Benzo(a)pyrene	0.014	0.10	ND	1		-
Dibenzo(a,h)anthracene	0.017	0.10	ND	1		V8
Benzo(g,h,i)perylene	0.016	0.10	ND	1		
Indeno(1,2,3-c,d)pyrene	0.016	0.10	ND	1		
Acenaphthylene	0.19	1.0	ND	1		
Acenaphthene	0.058	0.50	ND	1		
				-		
						-
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Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	92	25-157	
	1,000		
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Comments:	

# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8310	Preparatory Method:	SW3520	AAB #:_ D0602066
Lab Name: Columbia Analytical Services/R	edding		
Field Sample ID: ASE-116A-6D2DL	Lab Sample ID:	D0602066-002DL	Matrix: Water
% Solids:		Initial Calib	oration ID: 11/02/06LCI
Date Received: 12/14/06 Date	Extracted: 12/19/06	Date Anal	lyzed: 12/20/06
Concentration Units (ug/L or ug/Kg dry weigh	ot): LIG/L	Sample Volume	1 050 I

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.14	1.5	74	3	72	D2
Fluorene	0.030	0.30	ND	3		D2
Phenanthrene	0.020	0.30	ND	3		D2
Anthracene	0.015	0.30	ND	3		D2
Fluoranthene	0.022	0.30	ND	3		D2
Pyrene	0.030	0.30	ND	3		D2
Benzo(a)anthracene	0.048	0.30	ND	3		D2
Chrysene	0.042	0.30	ND	3		D2
Benzo(b)fluoranthene	0.025	0.30	ND	3		D2
Benzo(k)fluoranthene	0.033	0.30	ND	3		D2
Benzo(a)pyrene	0.042	0.30	ND	3		D2
Dibenzo(a,h)anthracene	0.051	0.30	ND	3		D2
Benzo(g,h,i)perylene	0.048	0.30	ND	3		D2
Indeno(1,2,3-c,d)pyrene	0.048	0.30	ND	3		D2V7
Acenaphthylene	0.57	3.0	ND	3		D2
Acenaphthene	0.17	1.5	ND	3		D2
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Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	87	25-157	
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Comments:	

### ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8310	Preparatory Method:	SW3520	AAB #: <u>D0602066</u>
Lab Name: Columbia Analytical Service	es/Redding		
Field Sample ID: ASE-115A-6D2	Lab Sample ID:	D0602066-004	Matrix: Water
% Solids:		Initial Calib	pration ID: 11/02/06LCI
Date Received: 12/14/06	Date Extracted: 12/19/06	Date Ana	lyzed: 12/20/06
Concentration Units (ug/L or ug/Kg dry w	eight): UG/L	Sample Volume:	1.050 L

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.048	0.50	150	1	160	
Fluorene	0.0100	0.10	0.31	1	0.78	C6
Phenanthrene	0.0066	0.10	ND	1		
Anthracene	0.0051	0.10	ND	1		
Fluoranthene	0.0074	0.10	ND	1		
Pyrene	0.0100	0.10	ND	1		A. P. W
Benzo(a)anthracene	0.016	0.10	ND	1		
Chrysene	0.014	0.10	ND.	1		
Benzo(b)fluoranthene	0.0084	0.10	ND	1		
Benzo(k)fluoranthene	0.011	0.10	ND	1		
Benzo(a)pyrene	0.014	0.10	ND	1		
Dibenzo(a,h)anthracene	0.017	0.10	ND	1	·	V8
Benzo(g,h,i)perylene	0.016	0.10	ND	1		
Indeno(1,2,3-c,d)pyrene	0.016	0.10	- ND	1		
Acenaphthylene	0.19	1.0	5.4	1		C1
Acenaphthene	0.058	0.50	ND	1		
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Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	87	25-157	
	-		

Comments:	
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### ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8310	Preparatory Method:	SW3520 AAB #: D0602066	
Lab Name: Columbia Analytical Service	es/Redding		
Field Sample ID: ASE-115A-6D2DL	Lab Sample ID:	D0602066-004DL Matrix: Water	
% Solids:		Initial Calibration ID: 11/02/06LCI	_
Date Received: 12/14/06	Date Extracted: 12/19/06	Date Analyzed: 12/20/06	
Concentration Units (ug/L or ug/Kg dry s	veight): UG/L	Sample Volume: 1 050 I	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Naphthalene	0.24	2.5	160	5	160	D2
Fluorene	0.050	0.50	0.19	5		D2E4
Phenanthrene	0.033	0.50	ND	5		D2
Anthracene	0.026	0.50	ND	5		D2
Fluoranthene	0.037	0.50	ND	5		D2
Pyrene	0.050	0.50	ND	5		D2
Benzo(a)anthracene	0.080	0.50	ND	5		D2
Chrysene	0.070	0.50	ND	5		D2
Benzo(b)fluoranthene	0.042	0.50	ND	5		D2
Benzo(k)fluoranthene	0.055	0.50	ND	5		D2
Benzo(a)pyrene	0.070	0.50	ND	5		D2
Dibenzo(a,h)anthracene	0.085	0.50	ND	5		D2
Benzo(g,h,i)perylene	0.080	0.50	ND	5		D2
Indeno(1,2,3-c,d)pyrene	0.080	0.50	ND	5		D2V7
Acenaphthylene	0.95	5.0	5.3	5		D2C1
Acenaphthene	0.29	2.5	ND	5		D2
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Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	87	25-157	

Comments:		

# ORGANIC ANALYSES DATA SHEET 6 BLANKS

Analytical Method: SW8310	AAB #:
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: NWB11219
Lab Sample ID: NWB11219	
Initial Calibration ID: 11/02/06LCI	

Analyte	MDL	Method Blank	RL	Q
Naphthalene	0.048	ND	0.50	
Fluorene	0.0100	ND	0.10	
Phenanthrene	0.0066	ND	0.10	
Anthracene	0.0051	ND	0.10	
Fluoranthene	0.0074	ND	0.10	
Pyrene	0.0100	ND	0.10	
Benzo(a)anthracene	0.016	ND	0.10	
Chrysene	0.014	ND	0.10	
Benzo(b)fluoranthene	0.0084	ND	0.10	
Benzo(k)fluoranthene	0.011	ND	0.10	
Benzo(a)pyrene	0.014	ND	0.10	
Dibenzo(a,h)anthracene	0.017	ND	0.10	- V8
Benzo(g,h,i)perylene	0.016	ND	0.10	, .,
Indeno(1,2,3-c,d)pyrene	0.016	ND	0.10	·
Acenaphthylene	0.19	ND	1.0	
Acenaphthene	0.058	ND	0.50	
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Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	74	25-157	
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Comments:		

Analytical Method: SW8310	AAB #:		
Lab Name: Columbia Analytical Ser	vices/Redding		
LCS ID: NWB11219LCS	Concentration Units (ug/L or mg/kg):	UG/L	
Date Extracted: 12/19/06	Date Analyzed: 12/20/06		
Initial Calibration ID: 11/02/06LCI			

Analyte	Expected	Found	%R	Control Limits	Q
Naphthalene	20.00	16.39	82	33-120	
Fluorene	4.000	3.732	93	53-125	
Phenanthrene	2.000	1.830	92	40-120	
Anthracene	2.000	1.779	89	54-125	
Fluoranthene	2.000	1.964	98	42-125	
Pyrene	2.000	2.125	106	55-125	-
Benzo(a)anthracene	2.000	1.843	92	39-135	
Chrysene	2.000	1.948	97	59-134	
Benzo(b)fluoranthene	2.000	1.814	91	31-137	
Benzo(k)fluoranthene	2.000	1.862	93	60-129	
Benzo(a)pyrene	2.000	1.814	91	52-125	
Dibenzo(a,h)anthracene	4.000	3.462	87	51-125	V8
Benzo(g,h,i)perylene	4.000	3.738	93	34-120	
Indeno(1,2,3-c,d)pyrene	2.000	2.055	103	55-125	
Acenaphthene	20.00	16.52	83	43-130	
Acenaphthylene	40.00	32.45	81	40-121	

Surrogate	Recovery	Control Limits	Qualifier
Terphenyl-d14 - SS	85	25-157	
		,	

Comments:	

Analytical Method: SW831	0	<del></del>	A	AAB #:	D060206	6				
Lab Name: Columbia Analytical Services/Redding										
Concentration Units (ug/L or mg/kg): UG/L %Solids:										
Parent Field Sample ID: <u>ASE-115A-6D2DL</u> MS ID: <u>A</u>				ASE-115A-6D2DLMS MSD ID: ASE-115A-6D2DLMSD					DLMSD	
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Naphthalene	165.1	19.23	184.7	102	188.5	123	2	30	33-120	M3D2
Fluorene	0.6108	3.846	3.742	81	3.904	86	4	30	53-125	D2
Phenanthrene	1.462	1.923	2.266	42	2.266	42	0	30	40-120	D2
Anthracene	0.03602	1.923	1.648	84	1.633	84	1	30	54-125	D2
Fluoranthene		1.923	1.273	66	1.295	68	2	30	42-125	D2
Pyrene		1.923	2.183	114	2.205	116	1	30	55-125	D2
Benzo(a)anthracene		1.923	1.807	94	1.735	91	4	30	39-135	D2
Chrysene		1.923	1.915	100	1.886	99	2	30	59-134	D2
Benzo(b)fluoranthene	0.03633	1.923	1.693	86	1.659	85	2	30	31-137	D2
Benzo(k)fluoranthene		1.923	1.711	89	1.679	88	2	30	60-129	D2
Benzo(a)pyrene		1.923	1.776	92	1.718	90	3	30	52-125	D2
Dibenzo(a,h)anthracene	0.450.5	3.846	2.696	70	2.685	70	0	30	51-125	D2
Benzo(g,h,i)perylene	0.4695	3.846	3.430	77	3.360	76	2	30	34-120	D2
Indeno(1,2,3-c,d)pyrene		1.923	1.909	99	1.919	99	2	30	55-125	D2V7
Acenaphthene	5.290	19.23 38.46	19.27 34.72	100 77	18.86 34.88		0	30	43-130 40-121	D2
Acenaphthylene	3.290	38.40	34.72	//	34.00	7.6	0	30	40-121	D2
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Comments:										

Analytical Method: SW831	. U		F	AAB#:	D060206	0				
Lab Name: Columbia Ana	lytical Serv	ices/Redd	ling	<del></del>						
Concentration Units (ug/L or	r mg/kg):	UG/L	************************			%Soli	ds:			
Parent Field Sample ID: AS	E-115A-6D	02	MS ID:	ASE-1	15A-6D2N	<u>1S</u>	MSD II	D: <u>ASE-1</u>	15A-6D2N	MSD
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
aphthalene	156.7	19.23	168.0	59	169.4	67	1	30	33-120	M3
luorene	0.7792	3.846	3.750	77	3.803	79	1	30	53-125	
nenanthrene	0.7028	1.923	2.186	77	2.210	79	1	30	40-120	
nthracene	0.1479	1.923	1.720	82	1.748	84	2	30	54-125	
uoranthene		1.923	1.623	84	1.655	87	2	30	42-125	
yrene		1.923	1.984	103	1.983	104	0	30	55-125	
enzo(a)anthracene	0.01144	1.923	1.834	95	1.730	90	6	30	39-135	
hrysene		1.923	1.967	102	1.881	99	4	30	59-134	
enzo(b)fluoranthene	0.08556	1.923	1.782	88	1.740	87	2 .	30	31-137	
enzo(k)fluoranthene	0.02190	1.923	1.842	95	1.779	92	3	30	60-129	
enzo(a)pyrene		1.923	1.877	98	1.793	94	4	30	52-125	
ibenzo(a,h)anthracene		3.846	3.166	82	2.944	77	7	30	51-125	V8
enzo(g,h,i)perylene		3.846	3.675	96	3.577	94	3	30	34-120	
ideno(1,2,3-c,d)pyrene	0.2345	1.923	1.966	90	1.946	90	1	30	55-125	
cenaphthene		19.23	20.00	104	21.13	111	5	30	43-130	
cenaphthylene	5.363	38.46	38.42	86	38.58	87	0	30	40-121	
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Comments:	ali, maria maria maria maria di maria di maria di maria di maria di maria di maria di maria di maria di maria d						-	anest (Maryan and an an an an an an an an an an an an an		

# ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: SW8310	AAB #: <u>D0602066</u>
Lab Name: Columbia Analytical Services/	Redding
Instrument ID #: LCI FL	

Field Sample ID/Std ID/	Laboratory	Date Analysis	Time Analysis	Date Analysis	Time Analysis
Blank ID/QC Sample ID	File ID	Started	Started	Completed	Completed
KSTD1	11102006	11/02/06	1334	11/02/06	1404
KSTD2	11102007	11/02/06	1405	11/02/06	1435
KSTD3	I1102008	11/02/06	1436	11/02/06	1506
KSTD4	I1102009	11/02/06	1506	11/02/06	1536
KSTD5	11102010	11/02/06	1537	11/02/06	1607
QCALTSTD3	I1102011	11/02/06	1608	11/02/06	1638
KSTD3	I1220005	12/20/06	1316	12/20/06	1346
NWBI1219	I1220007	12/20/06	1546	12/20/06	1616
NWB11219LCS	I1220008	12/20/06	1617	12/20/06	1647
ASE-116A-6D2	I1220009	12/20/06	1647	12/20/06	1717
ASE-115A-6D2	I1220010	12/20/06	1718	12/20/06	1748
ASE-115A-6D2MS	I1220011	12/20/06	1749	12/20/06	1819
ASE-115A-6D2MSD	I1220012	12/20/06	1819	12/20/06	1849
KSTD4	I1220013	12/20/06	1850	12/20/06	1920
ASE-115A-6D2DL	II220015	12/20/06	2013	12/20/06	2043
ASE-115A-6D2DLMS	I1220016	12/20/06	2043	12/20/06	2113
ASE-115A-6D2DLMSD	11220017	12/20/06	2114	12/20/06	2144
ASE-116A-6D2DL	II220018	12/20/06	2145	12/20/06	2215
KSTD3	I1220019	12/20/06	2215	12/20/06	2245
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Comments:		
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# ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method	d: <u>SW</u>	8310	***************************************	AAB #:	D0602066	
Lab Name: Colu	umbia Aı	nalytical	Services/Red	ding		
Instrument ID #:	LCI	UV	-			

Field Sample ID/Std ID/	Laboratory	Date Analysis	Time Analysis	Date Analysis	Time Analysis
Blank ID/QC Sample ID	File ID	Started	Started	Completed	Completed
KSTD1	I1102006	11/02/06	1334	11/02/06	1404
KSTD2	I1102007	11/02/06	1405	11/02/06	1435
KSTD3	11102008	11/02/06	1436	11/02/06	1506
KSTD4	11102009	11/02/06	1506	11/02/06	1536
KSTD5	I1102010	11/02/06	1537	11/02/06	1607
QCALTSTD3	I1102011	11/02/06	1608	11/02/06	1638
KSTD3	I1220005	12/20/06	1316	12/20/06	1346
NWB11219	I1220007	12/20/06	1546	12/20/06	1616
NWB11219LCS	I1220008	12/20/06	1617	12/20/06	1647
ASE-116A-6D2	I1220009	12/20/06	1647	12/20/06	1717
ASE-115A-6D2	I1220010	12/20/06	1718	12/20/06	1748
ASE-115A-6D2MS	I1220011	12/20/06	1749	12/20/06	1819
ASE-115A-6D2MSD	I1220012	12/20/06	1819	12/20/06	1849
KSTD4	I1220013	12/20/06	1850	12/20/06	1920
ASE-115A-6D2DL	I1220015	12/20/06	2013	12/20/06	2043
ASE-115A-6D2DLMS	I1220016	12/20/06	2043	12/20/06	2113
ASE-115A-6D2DLMSD	I1220017	12/20/06	2114	12/20/06	2144
ASE-116A-6D2DL	I1220018	12/20/06	2145	12/20/06	2215
KSTD3	I1220019	12/20/06	2215	12/20/06	2245
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Comments:			
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# ORGANIC ANALYSES DATA SHEET APPENDIX A SURROGATE RESULTS

Analytical Method: SW8310			Δ Δ	AB #: _D06	602066				
				1D //	002000				
Lab Name: Columbia Analy	tical Servic	es/Redair	ıg						
Matrix: Water									
Field/QC Sample ID	S1	S2	S3	S4	S5	S6	S7	S8	Q
NWB11219	74								
NWB11219LCS	85								
ASE-116A-6D2	92								
ASE-115A-6D2	87								
ASE-115A-6D2MS	91								
ASE-115A-6D2MSD	89								
ASE-115A-6D2DL	87								
ASE-115A-6D2DLMS	92								
ASE-115A-6D2DLMSD	91								
ASE-116A-6D2DL	87							·	
						,			
S1: Terphenyl-d14 - SS		25	-157	I					
Comments:									



December 29, 2006

Service Request No: D0602089

Shane Lowe CH2M Hill 2625 S. Plaza Drive Suite 300 Tempe, AZ 85282

RE: Sky Harbor/2959482

Dear Shane:

Enclosed are the results of the sample(s) submitted to our laboratory on December 15, 2006. For your reference, these analyses have been assigned our service request number D0602089.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 105. You may also contact me via email at MFesler@redding.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Mark Fesler

**Project Chemist** 

CC: Terri Krauss

# **Current CAS Redding Accreditation Programs**

# Federal and National Programs

- U.S Air Force, Air Force Center for Environmental Excellence (AFCEE)
   Approved laboratory for Wastewater and Hazardous Waste
- U.S. Army Corps of Engineers MRD, HTRW Mandatory Center of Expertise Validated for Wastewater and Hazardous Waste
- Department of the Navy, Naval Facilities Engineering Service Center (NFESC)

  Approved laboratory for Wastewater and Hazardous Waste

## State and Local Programs

- State of Alaska, Department of Environmental Conservation Approved Laboratory for Contaminated Sites Lab ID UST-001
- State of Arizona, Department of Health Services, Office of Laboratory Licensure
   Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste
   Lab ID AZ0604
- State of California, Department of Health Services, National Environmental Laboratory Accreditation Program (NELAP)

Approved Laboratory for Drinking Water, Wastewater and Hazardous Waste Lab ID 01105CA

- Los Angeles County Sanitation District
   Approved Laboratory for Wastewater
   Lab ID 10243
- State of California, Department of Health Services, Environmental Laboratory Accreditation Program (ELAP)

Approved Laboratory for Microbiology of Drinking Water and Wastewater Lab ID 2635

- State of Florida, Department of Health, Bureau of Laboratories (NELAP)
   Approved Environmental Testing Laboratory for Wastewater and Hazardous Waste
   Lab ID E87203
- State of Kansas, Department of Health and Environment (NELAP)
   Approved Laboratory for Hazardous Waste
   Lab ID E-10323
- State of Massachusetts, Department of Environmental Protection
   Approved laboratory for Drinking Water and Wastewater
   Lab ID M-CA025
- State of Oklahoma, Department of Environmental Quality
   Approved Laboratory for General Water Quality/Sludge Testing Lab ID 9952
- State of Oregon, Environmental Laboratory Accreditation Program (ORELAP)
   Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste
   Lab ID CA200004
- State of Utah, Department of Health, Bureau of Laboratory Improvement (NELAP)
   Approved Laboratory for Wastewater and Hazardous Waste
   Lab ID QUAL1
- State of Washington, Department of Ecology
   Approved Laboratory for Wastewater and Hazardous Waste
   Lab ID C1234
- State of Wisconsin, Department of Natural Resources
   Approved Laboratory for Wastewater and Hazardous Waste
   Lab ID 999767340

# Arizona Data Qualifiers

Revision 2.0, 11/26/2003

# Developed by the Sub-committee of the Arizona Environmental Laboratory Advisory Committee

#### Microbiology:

- A1 = Too numerous to count.
- A2 = Sample incubation period exceeded method requirement.
- A3 = Sample incubation period was shorter than method requirement.
- A4 = Target organism detected in associated method blank.
- A5 = Incubator/water bath temperature was outside method requirements.
- A6 = Target organism not detected in associated positive control.
- A7 = Micro sample received without adequate headspace.

#### Method/calibration blank:

- B1 = Target analyte detected in method blank at or above the method reporting limit.
- B2 = Non-target analyte detected in method blank and sample, producing interference.
- B3 = Target analyte detected in calibration blank at or above the method reporting limit.
- B4 = Target analyte detected in blank at/above method acceptance criteria.
- B5 = Target analyte detected in method blank at or above the method reporting limit, but below trigger level or MCL.
- B6 = Target analyte detected in calibration blank at or above the method reporting limit, but below trigger level or MCL.
- B7 = Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above the concentration found in the method blank.

#### Confirmation:

- C1 = Confirmatory analysis not performed as required by the method.
- C3 = Qualitative confirmation performed.
- C4 = Confirmatory analysis was past holding time.
- C5 = Confirmatory analysis was past holding time. Original result not confirmed.
- C6= Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the higher value was reported as there was no obvious chromatographic interference.
- C7 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic interference.

#### Dilution:

- D1 = Sample required dilution due to matrix.
- D2 = Sample required dilution due to high concentration of target analyte.
- D3 = Sample dilution required due to insufficient sample.
- D4 = Minimum reporting level (MRL) adjusted to reflect sample amount received and analyzed.

#### Estimated concentration:

- E1 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
- E2 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
- E3 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to holding time requirements.

## Arizona Data Qualifiers Revision 2.0, 11/26/2003

- E4 = Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL).
- E5 = Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL), but not confirmed by alternate analysis.
- E6 = Concentration estimated. Internal standard recoveries did not meet method acceptance criteria.
- E7 = Concentration estimated. Internal standard recoveries did not meet laboratory acceptance criteria.
- E8 = Analyte reported to MDL per project specification. Target analyte was not detected in the sample.

#### Hold time:

- H1 = Sample analysis performed past holding time.
- H2 = Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
- H3 = Sample was received and analyzed past holding time.
- H4 = Sample was extracted past required extraction holding time, but analyzed within analysis holding time.

#### BOD:

- K1 = The sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2 mg/L. Any reported result is an estimated value.
- K2 = The sample dilutions set up for the BOD analysis did not meet the criteria of a residual dissolved oxygen of at least 1 mg/L. Any reported result is an estimated value.
- K4 = The seed depletion was outside the method acceptance limits. The reported result is an estimated value.
- K5 = The dilution water D.O. depletion was > 0.2 mg/L.
- K6 = Glucose/glutamic acid BOD was below method acceptance criteria.
- K7 = A discrepancy between the BOD and COD results has been verified by reanalysis of the sample for COD.
- K8 = Glucose/glutamic acid BOD was above method acceptance levels.

# Laboratory fortified blank/blank spike:

- L1 = The associated blank spike recovery was above laboratory acceptance limits.
- L2 = The associated blank spike recovery was below laboratory acceptance limits.
- L3 = The associated blank spike recovery was above method acceptance limits.
- L4 = The associated blank spike recovery was below method acceptance limits.

#### Matrix spike:

- M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.
- M2 = Matrix spike recovery was low, the method control sample recovery was acceptable.
- M3 = The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
- M4 = The analysis of the spiked sample required a dilution such that the spike concentration was diluted below the reporting limit. The method control sample recovery was acceptable.
- M5 = Analyte concentration was determined by the method of standard addition (MSA).

## Arizona Data Qualifiers Revision 2.0, 11/26/2003

M6 = Matrix spike recovery was high. Data reported per ADEQ policy 0154.000.

M7 = Matrix spike recovery was low. Data reported per ADEQ policy 0154.000.

#### General:

N1 = See case narrative.

N2 = See corrective action report.

N3 = The analysis meets all method requirements. See case narrative.

### Sample quality:

- Q1 = Sample integrity was not maintained. See case narrative.
- Q2 = Sample received with headspace.
- Q3 = Sample received with improper chemical preservation.
- Q4 = Sample received and analyzed without chemical preservation.
- Q5 = Sample received with inadequate chemical preservation, but preserved by the laboratory.
- Q6 = Sample was received above recommended temperature.
- Q7 = Sample inadequately dechlorinated.
- Q8 = Insufficient sample received to meet method QC requirements. Batch QC requirements satisfies ADEQ policies 0154 and 0155.
- Q9 = Insufficient sample received to meet method QC requirements.
- Q10 = Sample received in inappropriate sample container.
- Q11 = Sample is heterogeneous. Sample homogeneity could not be readily achieved using routine laboratory practices.

#### **Duplicates:**

- R1 = RPD exceeded the method control limit. See case narrative.
- R2 = RPD exceeded the laboratory control limit. See case narrative.
- R4 = MS/MSD RPD exceeded the method control limit. Recovery met acceptance criteria.
- R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- R6 = LFB/LFBD RPD exceeded the method control limit. Recovery met acceptance criteria.
- R7 = LFB/LFBD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- R8 = Sample RPD exceeded the method control limit.
- R9 = Sample RPD exceeded the laboratory control limit.
- R10 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic problems.
- R11 = The RPD calculation for MS/MSD does not provide useful information due to the varying sample weights when Encore samplers/methanol field preserved samples are used.

#### Surrogate:

- S1 = Surrogate recovery was above laboratory acceptance limits, but within method acceptance limits.
- S3 = Surrogate recovery was above laboratory acceptance limits, but within method acceptance limits. No target analytes were detected in the sample.
- S4 = Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.
- S5 = Surrogate recovery was below laboratory acceptance limits, but within method acceptance limits.
- S6 = Surrogate recovery was below laboratory and method acceptance limits. Reextraction and/or reanalysis confirms low recovery caused by matrix effect.

# Arizona Data Qualifiers Revision 2.0, 11/26/2003

- S7 = Surrogate recovery was below laboratory and method acceptance limits. Unable to confirm matrix effect.
- S8 = The analysis of the sample required a dilution such that the surrogate recovery calculation does not provide any useful information. The method control sample recovery was acceptable.
- S10 = Surrogate recovery was above laboratory and method acceptance limits. See Case narrative.
- S11 = Surrogate recovery was high. Data reported per ADEQ policy 0154.000.
- S12 = Surrogate recovery was low. Data reported per ADEQ policy 0154.000.

### Method/analyte discrepancies:

- T1 = Method approved by EPA, but not yet licensed by ADHS.
- T2 = Cited ADHS licensed method does not contain this analyte as part of method compound list.
- T3 = Method not promulgated either by EPA or ADHS.
- T4 = Tentatively identified compound. Concentration is estimated and based on the closest internal standard.

#### Calibration verification:

- V1 = CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
- V2 = CCV recovery was above method acceptance limits. This target analyte was detected in the sample. The sample could not be reanalyzed due to insufficient sample.
- V3 = CCV recovery was above method acceptance limits. This target analyte was detected in the sample, but the sample was not reanalyzed. See case narrative.
- V4 = CCV recovery was below method acceptance limits. The sample could not be reanalyzed due to insufficient sample.
- V5 = CCV recovery after a group of samples was above acceptance limits. This target analyte was not detected in the sample. Acceptable per EPA Method 8000B.
- V6 = Data reported from one-point calibration criteria per ADEQ policy 0155.000.
- V7 = Calibration verification recovery was above the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
- V8 = Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.

#### Calibration:

- W1 = The % RSD for this compound was above 20%. The average % RSD for all compounds in the calibration met the 20% criteria as specified in EPA method 8000B.
- W2 = The % RSD for this compound was above 15%. The average % RSD for all compounds in the calibration met the 15% criteria as specified in EPA method 8260B/8270C.

Client:

Project: Sk

Sky Harbor/2959482

Service Request: D0602089

# SAMPLE CROSS-REFERENCE

SAMPLE#	CLIENT SAMPLE ID	<u>DATE</u>	TIME
D0602089-001	TB-121306	12/14/06	06:00
D0602089-002	ASE-41A-6D2	12/14/06	07:21
D0602089-003	ASE-92A-6D2	12/14/06	08:04
D0602089-004	ASE-91A-6D2	12/14/06	08:39
D0602089-005	PL-105A-6D2	12/14/06	09:19
D0602089-006	ASE-108A-6D2	12/14/06	09:54
D0602089-007	PL-505-6D2	12/14/06	10:04
D0602089-008	ASE-55A-6D2	12/14/06	10:38
D0602089-009	ASE-62A-6D2	12/14/06	11:26

# **CASE NARRATIVE**

Client:

Honeywell International, Incorporated

Service Request No.: D0602089

Project:

Sky Harbor

Date Received:

12/15/06

Sample Matrix: Aqueous

#### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables.

#### Sample Receipt

9 Aqueous samples were received for analysis at Columbia Analytical Services on 12/15/06.

No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4 degrees Celsius upon receipt at the laboratory.

#### TPH Diesel and Motor Oil by EPA Method 8015B

#### **Elevated Method Reporting Limits:**

Sample ASE-55A-6D2 required dilution due to the presence of elevated levels of target analyte. The reporting limits are adjusted to reflect the dilution.

#### Other:

Batch QC was run along with these samples. These results have been provided for informational purposes only. The Method Blank and Laboratory Control Samples were within control criteria. No anomalies were encountered during this analysis.

#### Volatile Organic Compounds by EPA Method 8260B

#### **Elevated Method Reporting Limits:**

Sample ASE-92A-6D2 required a dilution due to the presence of elevated levels of Tert-butylmethylether. The reporting limits are adjusted to reflect the dilution.

Approved by:	(Mah) Fin	Date:	12/29	136

# CHAIN OF CUSTODY DOCUMENTATION

3,337	Transwest 3726 E Atlanta Ave Phoenix, AZ 85040 Phone 602-437-0330 Client Contact: (uam Jennifer Holland CH2M HILL 2625 South Plaza Tempe, AZ 85282 480-377-6287 Tempe, AZ 85282 480-377-6287 Tocation ID Trip Blank Till 2 ASE-58A A ASE-58A	Geochem   10, co., address   22   22   22   22   22   22   22	Sampler: 44. Wiese Project Number: 2959460 Analysis Turnaround Time: 24 Hour -	mple My V V V V V V V V V V V V V V V V V V	Chain Of  Matrix Cont.  WATER 5  WATER	Cust of the first	Chain Of Custody / Analysis Request  Site Name: Site Na	ed nest			Page 1 of 1 Lab Use Only Project No: Job No. Lab Sample Numbers	O61213A
	Relinquished by: Relinquished by: Relinquished by:		Company: Merc. Company:	Tiv + Mar.	1/2	Date/Time: Date/Time: Date/Time:	Received by: Received by: Received by:	Toel	WPS WELL RESERVENCE OF STATES	2/1/2/1/2/	Company:	<u> </u>
11									•	201.1	990	





5090 Caterpillar Road Redding, CA 96003 Phone: (530) 244-5262 Fax #: (530) 244-4109

## COOLER RECEIPT FORM

Project	Client: HONEYWEW.	Batch No.:
1.	Cooler(s)/Sample(s) received on: 12/15/06	Shipped via: UPS
	Shipping Bill # (s):	# of Coolers/Packages
2.	Radiological Screening by:	Rejected
3.	Custody seals on outside of cooler:  If yes, where? Front Rear Lt Side Rt Side	YES N/A
	Seals intact:	YES (NO
	COOLER/SAMPLE PROCESSI	NG
4.	Sample Processing/Tagging by: Johnson	
5.	Cooler(s)/Sample(s) Temp's: 1°C	
6.	Type of packing material (circle): Ice Blue Ice Bubble Wrap Bubb	ble Bags Zip Locks Webbing
	Other:	
7.	Custody papers properly filled out (ink, signed, dated, released, etc.)?	YES NO
8.	Containers arrived in good condition (not broken, leaking, etc.)?	YES NO
9.	Samples received with adequate holding time remaining to conduct analysis	s? (YES) NO
10.	Container labels complete (i.e. analysis, preservation, date/time, etc.)?	(ES) NO
11.	Container labels and tags agree with custody papers?	YES NO
12.	Correct types of containers used for the tests indicated?	YES NO
	a.) Adequate sample received? If not, note on Exception Report.	YES) NO
13.	Containers supplied by:	CAS Other
14.	Preserved containers received with the appropriate preservative?	YES NO N/A
	pH: Vons 2 2 Pen Doe's (or) See pH log.	
15.	VOA vials free of air bubbles?	YES NO N/A
16.	Trip Blank preparation date: 12-14-06	CAS Other N/A
17.	Volatile Soil samples: Encores or Plugs in Vials	
	Freezer or GC/MS Date	:Time:N/A

See Exception Report for discrepancies.

Rev. 8/18/2004/ds

# **TPH – Diesel and Motor Oil**

Client: Project:

Honeywell International, Incorporated

Sky Harbor/2959482

Service Request:

D0602089

Cover Page - Organic Analysis Data Package TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name	Lab Code	Date Collected	Date Received
ASE-41A-6D2	D0602089-002	12/14/2006	12/15/2006
ASE-92A-6D2	D0602089-003	12/14/2006	12/15/2006
ASE-91A-6D2	D0602089-004	12/14/2006	12/15/2006
PL-105A-6D2	D0602089-005	12/14/2006	12/15/2006
ASE-108A-6D2	D0602089-006	12/14/2006	12/15/2006
PL-505-6D2	D0602089-007	12/14/2006	12/15/2006
ASE-55A-6D2	D0602089-008	12/14/2006	12/15/2006
ASE-62A-6D2	D0602089-009	12/14/2006	12/15/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:	Wida Ang	Name:	WIDA ANG
Date:	12/28/06	Title:	Organic Manager

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602089

**Date Collected:** 12/14/2006

**Date Received:** 12/15/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-41A-6D2

Lab Code:

Units: ug/L

D0602089-002

Basis: NA

Extraction Method: EPA 3510C

Level: Low

Analysis Method:

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note	
C10 - C22 DRO (TPH-Diesel)	1100	480	20	1	12/20/06	12/23/06		
C22 - C32 HRO (TPH-Motor Oil)	31 J	480	30	1	12/20/06	12/23/06	E4	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
Octacosane	60	26-152	12/23/06		-	
Tricontane	59	40-140	12/23/06			

Comments:

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Form 1A - Organic

Page 1 of 1

SuperSet Reference:

RR13375

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Ground water

Service Request: D0602089

**Date Collected:** 12/14/2006

**Date Received:** 12/15/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-92A-6D2

Lab Code:

D0602089-003

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	600	480	20	1	12/20/06	12/23/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/20/06	12/23/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	70	26-152	12/23/06		
Tricontane	67	40-140	12/23/06		

Comments:

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Form 1A - Organic

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SuperSet Reference: RR13375

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602089

**Date Collected:** 12/14/2006

**Date Received:** 12/15/2006

# TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-91A-6D2

Lab Code:

D0602089-004

Units: ug/L Basis: NA

Extraction Method: EPA 3510C

Level: Low

Analysis Method:

8015B

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	610	480	20	. 1	12/20/06	12/23/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/20/06	12/23/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane Tricontane	69 67	26-152 40-140	12/23/06 12/23/06		

Comments:

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SuperSet Reference:

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Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602089

**Date Collected:** 12/14/2006

**Date Received:** 12/15/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name: Lab Code:

PL-105A-6D2

D0602089-005

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method:

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	410 J	480	20	1	12/20/06	12/23/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/20/06	12/23/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
Octacosane Tricontane	64 62	26-152 40-140	12/23/06 12/23/06			

Comments:

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Form 1A - Organic

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SuperSet Reference: RR13375

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602089

**Date Collected: 12/14/2006** 

**Date Received:** 12/15/2006

# TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-108A-6D2

Lab Code:

D0602089-006

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	<b>58</b> J	480	20	1	12/20/06	12/23/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/20/06	12/23/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
Octacosane	64	26-152	12/23/06			
Tricontane	62	40-140	12/23/06			

Comments:

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Form 1A - Organic

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SuperSet Reference: RR13375

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

**Date Collected:** 12/14/2006

Service Request: D0602089

Sample Matrix:

Ground water

**Date Received:** 12/15/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

PL-505-6D2

Lab Code:

D0602089-007

Units: ug/L

Basis: NA

Extraction Method: EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel) C22 - C32 HRO (TPH-Motor Oil)	<b>61</b> J ND U	480 480	20 30	1 1	12/20/06 12/20/06	12/23/06 12/23/06	E4

		Cantual	Data		
Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	. 66	26-152	12/23/06		
Tricontane	65	40-140	12/23/06		

Comments:

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SuperSet Reference:

RR13375

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602089

**Date Collected:** 12/14/2006

**Date Received:** 12/15/2006

# TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-55A-6D2

Lab Code:

D0602089-008

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	10000 D	4800	200	10	12/20/06	12/23/06	D2
C22 - C32 HRO (TPH-Motor Oil)	ND U	4800	300	10	12/20/06	12/23/06	D2

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	66	26-152	12/23/06	D2	
Tricontane	66	40-140	12/23/06	D2	

Comments:

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Page 1 of

SuperSet Reference: RR13375

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602089

**Date Collected:** 12/14/2006 **Date Received:** 12/15/2006

# TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-62A-6D2

Lab Code:

D0602089-009

Units: ug/L Basis: NA

**Extraction Method:** EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	<b>45</b> J	480	20	1	12/20/06	12/23/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/20/06	12/23/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
Octacosane	68	26-152	12/23/06			
Tricontane	66	40-140	12/23/06			

Comments:

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Form 1A - Organic

Page 1 of

RR13375

SuperSet Reference:

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Water

Service Request: D0602089

Date Collected: NA

Date Received: NA

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

Method Blank

Lab Code:

DWG0601084-4

Units: ug/L

Basis: NA

**Extraction Method:** 

Level: Low

**Analysis Method:** 

EPA 3510C

8015B

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	ND U	500	20	1	12/20/06	12/22/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	500	30	1	12/20/06	12/22/06	

$(\mathcal{P}_{i}, \mathcal{P}_{i})$		Control	Date			
Surrogate Name	%Rec	Limits	Analyzed	Note		
Octacosane	66	26-152	12/22/06			
Tricontane	64	40-140	12/22/06			

**Comments:** 

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Form 1A - Organic

1 of 1

QA/QC Report

**Client:** 

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Ground water

Service Request: D0602089

Surrogate Recovery Summary

TPH-Diesel / Motor Oil Range Organics by SW8015B

**Extraction Method:** 

EPA 3510C

**Analysis Method:** 

8015B

Units: PERCENT

Level: Low

Sample Name	Lab Code	Sur1	Sur2
ASE-41A-6D2	D0602089-002	60	59
ASE-92A-6D2	D0602089-003	70	67
ASE-91A-6D2	D0602089-004	69	67
PL-105A-6D2	D0602089-005	64	62
ASE-108A-6D2	D0602089-006	64	62
PL-505-6D2	D0602089-007	66	65
ASE-55A-6D2	D0602089-008	66	66
ASE-62A-6D2	D0602089-009	68	66
Method Blank	DWG0601084-4	66	64
Batch QC	D0602091-006	66	65
Batch QCMS	DWG0601084-1	99	98
Batch QCDMS	DWG0601084-2	99	98
Lab Control Sample	DWG0601084-3	104	103

## Surrogate Recovery Control Limits (%)

Sur1 =	Octacosane		26-152
Sur2 =	Tricontane		40-140

Results flagged with an asterisk (\*) indicate values outside control criteria. Results flagged with a pound (#) indicate the control criteria is not applicable.

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Form 2A - Organic

Page 1 of 1

SuperSet Reference: RR13375

QA/QC Report

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Water

Service Request: D0602089

**Date Extracted:** 12/20/2006

**Date Analyzed:** 12/23/2006

Matrix Spike/Duplicate Matrix Spike Summary TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

Batch QC

Lab Code:

D0602091-006

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Extraction Lot: DWG0601084

Batch QCMS

DWG0601084-1

Batch QCDMS

DWG0601084-2

**Duplicate Matrix Spike** Matrix Spike %Rec RPD Sample Limits **RPD** Limit Result **Analyte Name** Result **Expected** %Rec Result **Expected** %Rec C10 - C22 DRO (TPH-Diesel) 1100 3410 2380 97 3430 2380 98 61-143 30

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Form 3A - Organic

Page

1 of

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SuperSet Reference:

RR13375

QA/QC Report

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Water

Service Request: D0602089

**Date Extracted:** 12/20/2006

**Date Analyzed:** 12/23/2006

Lab Control Spike Summary TPH-Diesel / Motor Oil Range Organics by SW8015B

**Extraction Method:** 

EPA 3510C

Analysis Method:

8015B

Units: ug/L Basis: NA

Level: Low

Extraction Lot: DWG0601084

Lab Control Sample DWG0601084-3

Lab Control Spike %Rec Limits %Rec **Analyte Name** Result Expected C10 - C22 DRO (TPH-Diesel) 2000 2500 80 61-143 C22 - C32 HRO (TPH-Motor Oil) 60-120 2010 2500 81

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Page

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SuperSet Reference: RR13375

# GC/MS VOLATILE ORGANICS

## ORGANIC ANALYSES DATA PACKAGE

Analytical	Method	: SW8260		AAB #: <u>D0602089</u>	
Lab Name:	Colur	nbia Analytical Services/Redding	<del></del>		
Base/Comm	nand: _I	HONEYWELL SKY HARBOR			
Project:	Sky H	arbor			
		Field Sample ID		Lab Sample ID	
		TB-121306		D0602089-001	
		ASE-41A-6D2		D0602089-002	-
		ASE-92A-6D2		D0602089-003	
		ASE-92A-6D2DL		D0602089-003DL	_
		ASE-91A-6D2		D0602089-004	
		PL-105A-6D2		D0602089-005	_
		ASE-108A-6D2		D0602089-006	-
		PL-505-6D2		D0602089-007	
		ASE-55A-6D2		D0602089-008	-
		ASE-62A-6D2		D0602089-009	
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Comments:					
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		**************************************			-
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completene and in the c	ss, for o	ther than the conditions detailed above	ve. Rele has beer	anditions of the contract, both technical ase of the data contained in this hardcon authorized by the Laboratory Manage	py data package
Signature:		73m.	Name:	Brian Moore	-
Date:		12/28/06	Title:	Brian Moore Technicae MANAger	_

RDD-061228:TC:BS-1359PST-SR:D0602089-D0602089-V

# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260			AAB #:D0602089
Lab Name: Columbia Analytical Serv	vices/Redding		
Field Sample ID: TB-121306	Lab Sample ID:	D0602089-001	Matrix: Water
% Solids:		Initial Calib	ration ID: 12/05/06MSM
Date Received: 12/15/06	Date Extracted:	Date Anal	yzed: 12/20/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		A. P. L.
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		***************************************
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	I		
Methylene chloride	0.15	5.0	0.43	1		E4
Iodomethane	0.20	10	ND	. 1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	ND	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		***************************************
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1 .		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		***************************************
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260	- · · · · · · · · · · · · · · · · · · ·		AAB #: D0602089	
Lab Name: Columbia Analytical Serv	vices/Redding			
Field Sample ID: TB-121306	Lab Sample ID:	D0602089-001	Matrix: Water	
% Solids:		Initial Calib	oration ID: <u>12/05/06MSM</u>	
Date Received: 12/15/06	Date Extracted:	Date Anal	lyzed: 12/20/06	
Concentration Units (ug/L or ug/Kg drs	weight): LIG/L	Sample Volume	5 000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	ND	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1 .		-
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	′ ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1 ·		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	. 1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:		Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Me	ethod: <u>SW8260</u>	· .				AAB #:l	00602089	
Lab Name:	Columbia Analyti	cal Services/Redd	ing					
Field Sample	ID: TB-121306		Lab Sa	ample ID: D	0602089-001	_ Matrix: _	Water	
% Solids:					Initial Cal	ibration ID:	12/05/06M	SM
	d: 12/15/06	Date Ext	racted:		Date An	alvzed: 12/	20/06	
	Units (ug/L or ug							
r	Tomes (dg/ L or dg	Tig any worght).			Jampie Volume.	2.0001		1
	Analyte		MDL	RL	Concentration	Dilution	Confirm	Qualifie
	1							
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				<u> </u>				
	Sur	rogate	] ]	Recovery	Control Lim	its Qu	alifier	
	4-Bromofluorob			104	82-124			
	Dibromofluoron			95	84-127 80-117			
	Toluene-d8 - SS	)		93	00-117			
			rnal Stan	dard	Qualifie	r		
		Fluorobenzene Chlorobenzene-	d5					
		1,4-Dichlorober						
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
					Surrogate Rec	overies are rep	orted in Append	dix O-A
Comments:					_		orted in Append	
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# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260	AAB #:_ D0602089
Lab Name: Columbia Analytical Serv	ces/Redding
Field Sample ID: ASE-41A-6D2	Lab Sample ID: D0602089-002 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/15/06	Date Extracted: Date Analyzed: 12/18/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	10	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.74	1		E4
Acetone	1.0	20	6.7	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	59	1		
1,1-Dichloroethane	0.12	2.0	27	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	11	1		
2-Butanone	0.90	10	2.0	1		E4
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND.	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		-
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	88	1		
1,2-Dichloroethane	0.18	1.0	ND	1		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Trichloroethene	0.10	1.0	0.96	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	4.3	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

# ORGANIC ANALYSES DATA SHEET 2 RESULTS

Analytical Method: SW8260	<del></del>		AAB #: <u>D0602089</u>	
Lab Name: Columbia Analytical Serv	ices/Redding	•		
Field Sample ID: ASE-41A-6D2	Lab Sample ID:	D0602089-002	Matrix: Water	
% Solids:		Initial Calibr	ration ID: <u>12/05/06MSM</u>	_
Date Received: 12/15/06	Date Extracted:	Date Analy	yzed: 12/18/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume	5 000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.65	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1	·	
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	65	1		
Xylene (total)	0.14	10	20	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	16	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1	-	
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	19	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	3.3	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.82	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	26	1		-
sec-Butylbenzene	0.17	5.0	5.2	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	4.3	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	110	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260		_					AAB #:D	0602089	
Lab Name:	Columbia Analyti	cal Services/	Redding							
Field Sample	ID: <u>ASE-41A-6</u>	5D2		Lab Sa	mple ID: D	0602	2089-002	Matrix: V	/ater	
% Solids:					-					
	d: <u>12/15/06</u>	Dat	e Extrac	ted:						
	units (ug/L or ug									
		y 8 7 ···8	ı .		· · · · · · · · · · · · · · · · · · ·	-			1	
	Analyte		MI	DL	RL	C	Concentration	Dilution	Confirm	Qualifier
						+				
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			•			+				
	Annual Annual Annual Annual Annual Annual Annual Annual Annual Annual Annual Annual Annual Annual Annual Annua				·	+				
						-		·	-	
						+				
	·									
	Sur	rogate		F	Recovery		Control Limits	s Qua	lifier	
	4-Bromofluorob				99		82-124			
	Dibromofluoron				100		84-127			
	Toluene-d8 - SS				96	<del> </del>	80-117			
				<u> </u>						
			Interna	ıl Stan	dard		Qualifier	4		
		Fluorobenz Chlorobenz				***************************************		_		
		1,4-Dichlor		ne-d4		·		_		
	]			***************************************		***********				
							Surrogate Recove	eries are repor	ted in Append	lix O-A
Comments:							Internal Stand			

Analytical Method: SW8260	<u>.</u>	AAB	3#: D0602089
Lab Name: Columbia Analytical Services/	Redding		
Field Sample ID: ASE-92A-6D2	Lab Sample ID: D	00602089-003 Matr	rix: Water
% Solids:		Initial Calibration	n ID: <u>12/05/06MSM</u>
Date Received: 12/15/06 Date	e Extracted:	Date Analyzed:	12/18/06
Concentration Units (ug/L or ug/Kg dry weig	ght): UG/L	Sample Volume: 5.0	000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	3.7	1		***************************************
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.23	1		E4
Acetone	1.0	20	1.8	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
lodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	240	1		
1,1-Dichloroethane	0.12	2.0	8.4	1		
Vinyl acetate	0.84	25	ND	1		,
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	3.5	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	29	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	1.4	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.25	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260			AAB #:_	D0602089
Lab Name: Columbia Analytical Serv	ices/Redding			
Field Sample ID: ASE-92A-6D2	Lab Sample ID:	D0602089-003	Matrix:	Water
% Solids:		Initial Calib	ration ID	: <u>12/05/06MSM</u>
Date Received: 12/15/06	Date Extracted:	Date Anal	lyzed: 12	2/18/06
Concentration Units (119/L or 119/Kg dry	weight): UG/L	Sample Volume	5 000	MI.

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	ND	1		-
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	6.1	1		
Xylene (total)	0.14	10	2,2	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	4.7	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	5.0	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	0.99	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.41	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	3.9	1		
sec-Butylbenzene	0.17	5.0	2.1	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.83	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	. 1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	22	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260				AAB #: <u>D</u>	0602089	
Lab Name:	Columbia Analyti	cal Services/Redding	5				
Field Sample	ID: <u>ASE-92A-6</u>	D2	Lab Sample ID: D	00602089-003	Matrix: _V	Vater	-
% Solids:				Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: 12/15/06	Date Extrac	cted:	Date Anal	yzed: 12/1	8/06	
		/Kg dry weight):					
	Analyte	M	DL RL	Concentration	Dilution	Confirm	Qualifie
				·			
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	······································						
	Sur	rogate	Recovery	Control Limits	S One	lifier	<u> </u>
	4-Bromofluorob		102	82-124	y Qua		
	Dibromofluoron		99	84-127			
	Toluene-d8 - SS		99	80-117			
		Intern	al Standard	Qualifier			
	•	Fluorobenzene					
		Chlorobenzene-d5			_		
		1,4-Dichlorobenze	ne-d4				
Comments:				Surrogate Recove Internal Stand			
Committee.			:				

Analytical Method: SW8260	· · · · · · · · · · · · · · · · · · ·	AAB #:_	D0602089
Lab Name: Columbia Analytical Serv	ices/Redding		
Field Sample ID: ASE-92A-6D2DL	Lab Sample ID:	D0602089-003DL Matrix:	Water
% Solids:		Initial Calibration ID:	12/05/06MSM
Date Received: 12/15/06	Date Extracted:	Date Analyzed: 12	/20/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: 5.000 M	ML_

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	3.6	50	ND	10		D2
Chloromethane	2.3	50	ND	10		D2
Vinyl chloride	2.2	10	4.3	10		D2E4
Bromomethane	2.7	10	ND	10		D2
Chloroethane	2.0	50	ND	10		D2
Trichlorofluoromethane	1.4	50	ND	10		D2
1,1-Dichloroethene	1.9	20	ND	10		D2
Acetone	10	200	ND	10		D2
Carbon disulfide	1.1	50	ND	10		D2
Methylene chloride	1.5	50	ND	10		D2
Iodomethane	2.0	100	ND	10		D2
trans-1,2-Dichloroethene	1.6	20	ND	10		D2
Tert-butylmethylether	1.7	10	300	10		D2
1,1-Dichloroethane	1.2	20	8.5	10	·	D2E4
Vinyl acetate	8.4	250	ND	10		D2
2,2-Dichloropropane	3.3	20	ND	10		D2
cis-1,2-Dichloroethene	1.7	20	3.9	10		D2E4
2-Butanone	9.0	100	ND	10		D2
Bromochloromethane	2.5	50	ND	10		D2
Chloroform	1.4	20	ND	10		D2
1,1,1-Trichloroethane	1.4	20	ND	10		D2
1,1-Dichloropropene	1.8	20	ND	10		D2
Carbon tetrachloride	1.8	20	ND	10		D2
Benzene	1.2	10	29	10		D2
1,2-Dichloroethane	1.8	10	ND	10		D2
Trichloroethene	1.0	10	1.9	10		D2E4
1,2-Dichloropropane	1.7	20	ND	10		D2
Dibromomethane	1.8	20	ND	10		D2
Bromodichloromethane	1.7	10	ND	10		D2
cis-1,3-Dichloropropene	1.3	20	ND	10		D2
4-methyl-2-pentanone	8.5	100	ND	10		D2
Toluene	1.4	20	ND	10		D2
trans-1,3-Dichloropropene	1.9	20	ND	10		D2

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260		AAB #: D0602089
Lab Name: Columbia Analytical Serv	rices/Redding	
Field Sample ID: ASE-92A-6D2DL	Lab Sample ID: D0602089-003DL	Matrix: Water
% Solids:	Initial Cali	bration ID: 12/05/06MSM
Date Received: 12/15/06	Date Extracted: Date Ana	alyzed: 12/20/06
Concentration Units (ug/L or ug/Kg dry	weight): <u>UG/L</u> Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	2.2	10	ND	10		D2
Tetrachloroethene	2.2	10	ND	10		D2
1,3-Dichloropropane	1.1	20	ND	10		D2
2-Hexanone	5.8	100	ND	10		D2
Dibromochloromethane	1.5	20	ND	10		D2
1,2-Dibromoethane	1.5	20	ND	10		D2
Chlorobenzene	1.5	10	ND	10		D2
1,1,1,2-Tetrachloroethane	2.3	50	ND	10		D2
Ethylbenzene	1.5	20	6.4	10		D2E4
Xylene (total)	1.4	100	ND	10		D2
Styrene	1.6	20	ND	10		D2
Bromoform	1.8	50	ND	10		D2
Isopropylbenzene	1.7	20	4.8	10		D2E4
1,1,2,2-Tetrachloroethane	1.7	10	ND	10		D2
Bromobenzene	1.7	50	ND	10		D2
1,2,3-Trichloropropane	2.0	100	ND	10		D2
n-Propylbenzene	1.3	20	5.0	10		D2E4
2-Chlorotoluene	1.6	50	ND	10		D2
1,3,5-Trimethylbenzene	1.5	20	ND	10		. D2
4-Chlorotoluene	1.6	50	ND	10		D2
tert-Butylbenzene	1.8	50	ND	10		D2
1,2,4-Trimethylbenzene	1.3	20	4.9	10		D2E4
sec-Butylbenzene	1.7	50	2.6	10		D2E4
1,3-Dichlorobenzene	1.1	10	ND	10		D2
p-Isopropyltoluene	1.0	20	ND	10		D2
1,4-Dichlorobenzene	1.1	10	ND	10		D2
n-Butylbenzene	3.3	50	ND	10		D2
1,2-Dichlorobenzene	1.4	10	ND	10		D2
1,2-Dibromo-3-chloropropane	8.1	50	ND	10		D2
1,2,4-Trichlorobenzene	3.6	50	ND	10		D2
Hexachlorobutadiene	6.0	10	ND	10		D2
Naphthalene	2.9	20	25	10		D2
1,2,3-Trichlorobenzene	3.7	50	ND	10		D2

Comments:		Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Surrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 100 82-124  Dibromofluoromethane - SS 95 84-127  Toluene-d8 - SS 97 80-117  Internal Standard Qualifier  Fluorobenzene Chlorobenzene-d5  1,4-Dichlorobenzene-d4  Surrogate Recovery Control Limits Qualifier  Fluorobenzene Chlorobenzene-d4	Analytical Me	ethod: SW8260					AAB	#: <u>D0</u>	602089	
Initial Calibration ID: 12/05/06MSM   Date Received: 12/15/06   Date Extracted: Date Analyzed: 12/20/06   Date Concentration Units (ug/L or ug/Kg dry weight): UG/L   Sample Volume: 5.000 ML	Lab Name:	Columbia Analyti	cal Services/Reddi	ng						
Initial Calibration ID: 12/05/06MSM   Date Received: 12/15/06   Date Extracted: Date Analyzed: 12/20/06   Date Concentration Units (ug/L or ug/Kg dry weight): UG/L   Sample Volume: 5.000 ML	Field Sample	ID: ASE-92A-6	D2DL	Lab Sa	ample ID: D	0602089-003D	L Matr	ix: Wa	ater	
Concentration Units (ug/L or ug/Kg dry weight): UG/L Sample Volume: _5.000 ML  Analyte MDL RL Concentration Dilution Confirm Qualifies										
Concentration Units (ug/L or ug/Kg dry weight): UG/L Sample Volume: 5.000 ML  Analyte MDL RL Concentration Dilution Confirm Qualific  Analyte MDL RL Concentration Dilution Confirm Qualific  Analyte MDL RL Concentration Dilution Confirm Qualific  Analyte Polyton Confirm Qualific  Analyte Polyton Confirm Qualific  Analyte Polyton Confirm Qualific  Analyte Polyton Confirm Qualific  Surrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 100 82-124  Dibromofluoromethane - SS 95 84-127  Toluene-d8 - SS 97 80-117  Internal Standard Qualifier  Fluorobenzene Chlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A	Date Received	i: 12/15/06	Date Ext	racted:		Date A	Analyzed:	12/20/	/06	
Surrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 100 82-124  Dibromofluoromethane - SS 95 84-127  Toluene-d8 - SS 97 80-117  Internal Standard Qualifier  Fluorobenzene Chlorobenzene-d5  1,4-Dichlorobenzene-d4  Surrogate Recovery Control Limits Qualifier  Fluorobenzene Chlorobenzene-d4										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 95 84-127 Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A		Analyte		MDL	RL	Concentrat	on Dilu	ıtion	Confirm	Qualifie
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 95 84-127 Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 95 84-127 Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A					-					
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 95 84-127 Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A									·	
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 95 84-127 Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 95 84-127 Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A		animakan mananan mananan mananan mananan mananan mananan mananan mananan mananan mananan mananan mananan manan								
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4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 95 84-127 Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 95 84-127 Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 95 84-127 Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A	11	2200374311000012011000000000								
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 95 84-127 Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A	i									
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 95 84-127 Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 95 84-127 Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A	-	<u>.</u>								-
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 95 84-127 Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 95 84-127 Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A		4.	MININGS TWO STATES OF THE STAT							
4-Bromofluorobenzene - SS 100 82-124 Dibromofluoromethane - SS 95 84-127 Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
Dibromofluoromethane - SS 95 84-127 Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A		Sur	rogate	F	Recovery	Control Li	mits	Quali	fier	
Toluene-d8 - SS 97 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A								***************************************		
Internal Standard Qualifier  Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A					<del></del>					
Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A		Toluene-d8 - SS			97	80-117				
Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
Chlorobenzene-d5  1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A			Inter	rnal Stan	dard	Qualit	ier			
1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
Surrogate Recoveries are reported in Appendix O-A										
		İ	1,4-Dichloroben	zene-a4						
Comments:										
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Analytical Method: SW8260	AAB #: <u>D0602089</u>
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-91A-6D2 Lab Sample ID:	D0602089-004 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/15/06 Date Extracted:	Date Analyzed: 12/18/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume: 5 000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	0.49	1		E4
Vinyl chloride	0.22	1.0	17	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	46	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		-
Acetone	1.0	20	1.9	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	64	1		
1,1-Dichloroethane	0.12	2.0	120	1		*
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	2.5	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	46	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.77	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		- year
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.25	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Analytical Method: SW8260			AAB #: <u>D060208</u>	9
Lab Name: Columbia Analytical Serv	ices/Redding			
Field Sample ID: ASE-91A-6D2	Lab Sample ID:	D0602089-004	Matrix:Water	
% Solids:		Initial Cal	ibration ID: <u>12/05/0</u>	6MSM
Date Received: 12/15/06	Date Extracted:	Date An	nalyzed: 12/18/06	***************************************
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume	5 000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	ND	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	. 1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	. 1		
Ethylbenzene	0.15	2.0	3.8	11		
Xylene (total)	0.14	10	2.1	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	14	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	13	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	0.98	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.68	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	4.1	1		
sec-Butylbenzene	0.17	5.0	4.9	1	,	E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	1.4	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	11		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	43	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260					AAB #:_	D0602089	
Lab Name:	Columbia Analyti	cal Services/Reddir	ng					
Field Sample	ID: ASE-91A-6	D2	Lab San	nple ID: D	00602089-004	Matrix:	Water	
% Solids:		· · · · · · · · · · · · · · · · · · ·					12/05/06M	
		Date Extr	acted:					***************************************
		g/Kg dry weight):						
Concentration	TOIRIS (ug/L or ug	y Kg dry weight).			Sample volume	<u> </u>	VIL	<del></del>
	Analyte	<u> </u>	MDL	RL	Concentration	on Dilutio	Confirm	Qualifie
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	4-Bromofluorob	rogate enzene - SS	K	103	82-124	ints Q	namier	
	Dibromofluoron			99	84-127			
	Toluene-d8 - SS			98	80-117			
	<u></u>							
		Inter	nal Stand	ard	Qualifi	er		
		Fluorobenzene				_		
		Chlorobenzene-d 1,4-Dichlorobenz						
		1,4-131611101000112	ene d+					
					Surrogate Re	coveries are re	oorted in Appen	dix O-A
Comments:							ported in Appen	
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Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: PL-105A-6D2 Lab Sample ID:	D0602089-005 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/15/06 Date Extracted:	Date Analyzed: 12/18/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	0.44	1		E4
Vinyl chloride	0.22	1.0	14	1		- ST- GWWWWANA
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	10	1		
Trichlorofluoromethane	0.14	5.0	ND	1		,
1,1-Dichloroethene	0.19	2.0	0.48	1		E4
Acetone	1.0	20	5.1	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	0.22	1		E4
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	4.9	. 1		
1,1-Dichloroethane	0.12	2.0	86	1	·	
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	1.1	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	22	1		
1,2-Dichloroethane	0.18	1.0	ND	1.	-	
Trichloroethene	0.10	1.0	0.32	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.21	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	personal desired and the second secon	AAB #: D0602089
Lab Name: Columbia Analytical Service	ces/Redding	
Field Sample ID: PL-105A-6D2	Lab Sample ID: D0	0602089-005 Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/15/06	Date Extracted:	Date Analyzed: 12/18/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	ND	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	3.4	1		
Xylene (total)	0.14	10	2.4	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	13	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	8.8	1		
2-Chlorotoluene	0.16	5.0	ND	.1		
1,3,5-Trimethylbenzene	0.15	2.0	0.28	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.68	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	1.8	11		E4
sec-Butylbenzene	0.17	5.0	5.5	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.63	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	51	1		
1,2,3-Trichlorobenzene	0.37	5.0	. ND	1		

Comments:		

Analytical M	ethod: SW8260		<del>-</del>					AAB #: D	0602089	
Lab Name:	Columbia Analyti	ical Services/	Redding							
Field Sample	ID: PL-105A-6	D2		Lab Sa	ample ID: D	00602	089-005	Matrix: V	Vater	
% Solids:					-		Initial Calib			
Date Receive	d: 12/15/06	Dat	te Extrac	ted:			Date Anal	yzed: _12/1	8/06	
	n Units (ug/L or ug						nple Volume:			
	Analyte		MI	DL	RL	С	oncentration	Dilution	Confirm	Qualifier
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						<u> </u>				
		rogate		F	Recovery	Control Limits		its Qualifier		
	4-Bromofluorob				98	-	82-124			
	Dibromofluoron Toluene-d8 - SS				100	-	84-127 80-117			
			Interna	al Stan	dard	-	Qualifier			
		Fluorobenz						_		
		Chlorobenzene-d5								
		1,4-Dichlor	robenzer	ie-d4						
Comments:							Surrogate Recove Internal Stand			
									***************************************	

Analytical Method: SW8260	AAB #: D0602089
Lab Name: Columbia Analytical Serv	vices/Redding
Field Sample ID: ASE-108A-6D2	Lab Sample ID: D0602089-006 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/15/06	Date Extracted: Date Analyzed: 12/18/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML

Analyte	MDL RL Co		Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	. 1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	3.5	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	. ND	1		NOTE THE PROPERTY OF THE PROPE
Acetone	1.0	20	2.1	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		100000000000000000000000000000000000000
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		***************************************
Tert-butylmethylether	0.17	1.0	6.8	I		
1,1-Dichloroethane	0.12	2.0	21	1		
Vinyl acetate	0.84	25	ND	1		A State of the state of
2,2-Dichloropropane	0.33	2.0	ND	1		,
cis-1,2-Dichloroethene	0.17	2.0	2.1	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.21	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1	***************************************	
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	3.7	1		
1,2-Dichloroethane	0.18	1.0	ND	1		,
Trichloroethene	0.10	1.0	3.0	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		V11617-1-1101-14146
Toluene	0.14	2.0	ND	1		,
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	<del> </del>		AAB #: <u>D0602089</u>
Lab Name: Columbia Analytical So	ervices/Redding		
Field Sample ID: ASE-108A-6D2	Lab Sample ID	D0602089-006	Matrix: Water
% Solids:		Initial Ca	libration ID: 12/05/06MSM
Date Received: 12/15/06	Date Extracted:	Date A	nalyzed: 12/18/06
Concentration Units (ug/L or ug/Kg)	dry weight): LIG/I	Sample Volume	• 5 000 MI

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.29	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	2.3	1		
Xylene (total)	0.14	10	0.64	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	2.0	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	2.0	1		
2-Chlorotoluene	0.16	5.0	. ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	0.25	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	1.3	1		E4
sec-Butylbenzene	0.17	5.0	1.2	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.31	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	0.48	1		E4
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	. ND	1		
Naphthalene	0.29	2.0	6.1	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Analytical M	ethod: SW8260	****					AAB #:D	0602089	
Lab Name:	Columbia Analyti	cal Services/Red	dding						
Field Sample	ID: ASE-108A-	6D2	Lab S	ample ID: I	00602089	-006	Matrix: _V	Vater	
% Solids:					Ir	nitial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: <u>12/15/06</u>	Date B	Extracted:			Date Anal	yzed: <u>12/1</u>	8/06	
	n Units (ug/L or ug								
Analyte MI			MDL	RL	Conce	entration	Dilution Confirm		Qualifier
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				<u> </u>					
	Sur	rogate		Recovery		Control Limits		s Qualifier	
	4-Bromofluorob			103		82-124			
	Dibromofluoron		-	99 101	84-127 80-117				
	Toluene-d8 - SS			101					
	<u> </u>								
			ternal Star	ndard		Qualifier			
	Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene								
	1						I		
							eries are repoi		
Comments:					Ir	nternal Stand	ards are repor	ted in Append	lix O-C

Analytical Method: SW8260	· · · · · · · · · · · · · · · · · · ·	AAB #: <u>D0602089</u>
Lab Name: Columbia Analytical Serv	rices/Redding	
Field Sample ID: PL-505-6D2	Lab Sample ID:	D0602089-007 Matrix: Water
% Solids:		Initial Calibration ID: 12/05/06MSM
Date Received: 12/15/06	Date Extracted:	Date Analyzed: <u>12/18/06</u>
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	3.3	1		***************************************
Bromomethane	0.27	1.0	ND	1		,
Chloroethane	0.20	5.0	ND	1		***************************************
Trichlorofluoromethane	0.14	5.0	ND	1		1.111.11.11.11.11.11.11.11.11.11.11.11.
1,1-Dichloroethene	0.19	2.0	0.35	1		E4
Acetone	1.0	20	2.1	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	6.8	1		
1,1-Dichloroethane	0.12	2.0	21	I		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	2.1	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.21	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	3.7	1		
1,2-Dichloroethane	0.18	1.0	ND	1		,
Trichloroethene	0.10	1.0	3.0	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		***************************************
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	· · · · · · · · · · · · · · · · · · ·		AAB #: D0602089
Lab Name: Columbia Analytical Serv	vices/Redding		
Field Sample ID: PL-505-6D2	Lab Sample ID:	D0602089-007	Matrix: Water
% Solids:		Initial Calibr	ration ID: 12/05/06MSM
Date Received: 12/15/06	Date Extracted:	Date Analy	yzed: 12/18/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume	5 000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.27	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		***************************************
Ethylbenzene	0.15	2.0	2.2	1		······································
Xylene (total)	0.14	10	0.64	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	2.0	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		***************************************
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	2.0	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	0.24	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	1.3	1		E4
sec-Butylbenzene	0.17	5.0	1.2	I		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.29	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	I		
n-Butylbenzene	0.33	5.0	0.44	1		E4
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	5.7	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C
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Analytical M	ethod: SW8260	MODEL CONTRACTOR CONTR					AAB #:D	0602089	
Lab Name:	Columbia Analyti	cal Services/Re	dding						
Field Sample	ID: <u>PL-505-6D2</u>	2	Lab	Sample ID: I	0602	089-007	Matrix: V	/ater	-
% Solids:						Initial Calib	ration ID: _	12/05/06M	SM
Date Receive	d: <u>12/15/06</u>	Date I	Extracted:			Date Anal	yzed: <u>12/1</u>	8/06	
Concentration	n Units (ug/L or ug	/Kg dry weight	): <u>UG/I</u>	_	Sam	ple Volume:	5.000 MI		
	Analyte		MDL	RL	C	oncentration	Dilution	Confirm	Qualifie
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	-		<del></del>						
	Sur	rogate		Recovery	Τ.	Control Limit	s Qua	lifier	
	4-Bromofluorob	enzene - SS		100		82-124			
	Dibromofluoron			98		84-127	***************************************	***************************************	
	Toluene-d8 - SS			98	-	80-117			
	<u> </u>								
		. In	nternal St	andard		Qualifier			
		Fluorobenzen				***************************************			
		Chlorobenzen							
		1,4-Dichlorob	enzene-d <sup>2</sup>	1					
Comments:						Surrogate Recov Internal Stand			
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Analytical Method: SW8260	AAB #: <u>D0602089</u>
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-55A-6D2 Lab Sample ID:	D0602089-008 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/15/06 Date Extracted:	Date Analyzed: 12/18/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume:5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	0.46	1		E4
Vinyl chloride	0.22	1.0	0.45	. 1		E4
Bromomethane	0.27	1.0	ND	1 .		
Chloroethane	0.20	5.0	1.5	1		E4
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	3.1	1 .		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	· ND	1		
Iodomethane	0.20	10	ND	1		-
trans-1,2-Dichloroethene	0.16	2.0	ND	1 .		
Tert-butylmethylether	0.17	1.0	6.2	1		
1,1-Dichloroethane	0.12	2.0	7.6	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	. 1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	. 1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1	·	
Benzene	0.12	1.0	13	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	0.25	1		E4
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		. E. S. &
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.29	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260			AAB#: <u>D0602089</u>	-
Lab Name: Columbia Analytical Service	ces/Redding			
Field Sample ID: ASE-55A-6D2	Lab Sample ID:	D0602089-008	Matrix: Water	
% Solids:		Initial Ca	libration ID: 12/05/06MSM	
Date Received: 12/15/06	Date Extracted:	Date Ar	nalyzed: 12/18/06	
Concentration Units (ng/L, or ng/Kg, dry y	veight): UG/L	Sample Volume	· 5 000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.31	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	9.2	1		
Xylene (total)	0.14	- 10	2.7	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2:0	22	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	25	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	0.45	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.81	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	2.7	1		
sec-Butylbenzene	0.17	5.0	7.5	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.58	1		E4
1,4-Dichlorobenzene	0.11	1.0	0.12	1		E4
n-Butylbenzene	0.33	5.0	4.3	1		E4
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		7 T.M
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	55	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260							AA	B#:D	0602089	
Lab Name:	Columbia Analyti	cal Services/F	Redding								
Field Sample	ID: <u>ASE-55A-6</u>	D2		Lab Sa	ample I <u>D</u> : D	0602	089-008	Ma	trix: <u>W</u>	/ater	<u>.</u>
% Solids:	<u>.</u>						Initial Calib	ratio	on ID: _	12/05/06M	SM
Date Receive	ed: 12/15/06	Date	e Extrac	ted: _			Date Anal	yzec	d: <u>12/1</u>	8/06	
Concentration	n Units (ug/L or ug	/Kg dry weig	;ht): <u> </u>	JG/L		San	nple Volume:	_5	.000 MI		
	Analyte		MI	)L	RL	C	oncentration	Di	lution	Confirm	Qualifier
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-	Sur	rogate		F	Recovery	T	Control Limit	s	Qua	lifier	
	4-Bromofluorob				104	82-124					
	Dibromofluoron Toluene-d8 - SS			100		-	84-127 80-117				
	Toluche-uo - 55					$\dagger$	80-117	-	-		
			Interna	l Stan	dard		Qualifier	$\neg$			
		Fluorobenze		·	uu u		Quantite	7			
		Chlorobenz									
		1,4-Dichlor	obenzen	ie-d4							
							G				7: 0.4
Comments:							Surrogate Recove Internal Stand				
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Analytical Method: SW8260	AAB#: D0602089
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-62A-6D2 Lab Sample ID:	D0602089-009 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/15/06 Date Extracted:	Date Analyzed: 12/18/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	1.8	1		
Bromomethane	0.27	1.0	. ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	2.0	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	1.8	1		
1,1-Dichloroethane	0.12	2.0	. 11	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.47	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	0.36	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	0.91	1		E4
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	1.5	1		
1,2-Dichloropropane	0.17	2.0	ND	1		***************************************
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB #: D0602089
Lab Name: Columbia Analytical Serv	ces/Redding
Field Sample ID: ASE-62A-6D2	Lab Sample ID: D0602089-009 Matrix: Water
% Solids:	Initial Calibration ID: 12/05/06MSM
Date Received: 12/15/06	Date Extracted: Date Analyzed:
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.27	1		E4
1,3-Dichloropropane	0.11	2.0	. ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	2.8	1		
Xylene (total)	0.14	10	0.75	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	1.9	1		E4
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	2.8	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	0.31	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	1.5	1		E4
sec-Butylbenzene	0.17	5.0	0.99	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.27	1		. E4
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		
Naphthalene	0.29	2.0	6.0	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:		Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: <u>SW8260</u>					AAB #: <u>D</u>	0602089	
Lab Name:	Columbia Analyti	cal Services/Redding	5					
Field Sample	ID: ASE-62A-6	5D2	Lab Sample	ID: D0	602089-009	Matrix: W	/ater	
% Solids:					Initial Calib			
Date Receive	d: 12/15/06	Date Extra	cted:		Date Anal	yzed: 12/1	8/06	
		g/Kg dry weight):						
	Analyte	M	DL	RL	Concentration	Dilution	Confirm	Qualifie
	Wild Will State Control of the Contr	-						
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	- Alekan							
	vectories (No. 745 and 1)							
					,			***************************************
	Sur	rogate	Recov	ery	Control Limits	s Qua	lifier	
	4-Bromofluorob		101		82-124			
	Dibromofluoron		100		84-127			
	Toluene-d8 - SS		102	!	80-117			
		Intern	al Standard		Qualifier			
		Fluorobenzene				_		
		Chlorobenzene-d5 1,4-Dichlorobenze				-		
	•							
					Surrogate Recov	eries are repoi	ted in Appena	lix O-A
Comments:					Internal Stand	_		
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Analytical Method: SW8260	AAB #:D0602089
Lab Name: Columbia Analytical Services/Redding	·
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1218W01
Lab Sample ID: M1218W01	
Initial Calibration ID: 12/05/06MSM	

Analyte	MDL	Method Blank	RL	Q
Dichlorodifluoromethane	0.36	ND	5.0	
Chloromethane	0.23	ND	5.0	
Vinyl chloride	0.22	ND	1.0	
Bromomethane	0.27	ND	1.0	
Chloroethane	0.20	ND	5.0	
Trichlorofluoromethane	0.14	ND	5.0	
1,1-Dichloroethene	0.19	ND	2.0	
Acetone	1.0	ND	20	
Carbon disulfide	0.11	ND	5.0	
Methylene chloride	0.15	ND	5.0	
Iodomethane	0.20	ND	10	
trans-1,2-Dichloroethene	0.16	ND	2.0	· · · · · · · · · · · · · · · · · · ·
Tert-butylmethylether	0.17	ND	1.0	
1,1-Dichloroethane	0.12	ND	2.0	
Vinyl acetate	0.84	ND	25	
2,2-Dichloropropane	0.33	ND	2.0	
cis-1,2-Dichloroethene	0.17	ND	2.0	
2-Butanone	0.90	ND	10	
Bromochloromethane	0.25	ND	5.0	
Chloroform	0.14	0.30	2.0	E4
1,1,1-Trichloroethane	0.14	ND	2.0	
1,1-Dichloropropene	0.18	ND	2.0	
Carbon tetrachloride	0.18	ND	2.0	
Benzene	0.12	ND	1.0	
1,2-Dichloroethane	0.18	ND	1.0	
Trichloroethene	0.10	ND	1.0	
1,2-Dichloropropane	0.17	ND	2.0	
Dibromomethane	0.18	ND	2.0	
Bromodichloromethane	0.17	ND	1.0	
cis-1,3-Dichloropropene	0.13	ND	2.0	
4-methyl-2-pentanone	0.85	ND	10	
Toluene	0.14	ND	2.0	
trans-1,3-Dichloropropene	0.19	ND	2.0	

Comments:	
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Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1218W01
Lab Sample ID: M1218W01	

Initial Calibration ID: 12/05/06MSM

Analyte	MDL	Method Blank	RL	Q
1,1,2-Trichloroethane	0.22	ND	1.0	
Tetrachloroethene	0.22	ND	1.0	
1,3-Dichloropropane	0.11	ND	2.0	
2-Hexanone	0.58	ND	10	
Dibromochloromethane	0.15	ND	2.0	
1,2-Dibromoethane	0.15	ND	2.0	
Chlorobenzene	0.15	ND	1.0	
1,1,1,2-Tetrachloroethane	0.23	ND	5.0	
Ethylbenzene	0.15	ND	2.0	
Xylene (total)	0.14	ND	10	
Styrene	0.16	ND	2.0	
Bromoform	0.18	ND	5.0	
Isopropylbenzene	0.17	ND	2.0	
1,1,2,2-Tetrachloroethane	0.17	ND	1.0	
Bromobenzene	0.17	ND	5.0	
1,2,3-Trichloropropane	0.20	ND	10	
n-Propylbenzene	0.13	ND	2.0	
2-Chlorotoluene	0.16	ND	5.0	
1,3,5-Trimethylbenzene	0.15	ND	2.0	
4-Chlorotoluene	0.16	ND	5.0	
tert-Butylbenzene	0.18	ND	5.0	
1,2,4-Trimethylbenzene	0.13	ND	2.0	
sec-Butylbenzene	0.17	ND	5.0	
1,3-Dichlorobenzene	0.11	ND	1.0	
p-Isopropyltoluene	0.10	ND	2.0	
1,4-Dichlorobenzene	0.11	ND	1.0	
n-Butylbenzene	0.33	ND	5.0	
1,2-Dichlorobenzene	0.14	ND	1.0	
1,2-Dibromo-3-chloropropane	0.81	ND	5.0	
1,2,4-Trichlorobenzene	0.36	ND	5.0	
Hexachlorobutadiene	0.60	ND	1.0	
Naphthalene	0.29	ND	2.0	
1,2,3-Trichlorobenzene	0.37	ND	5.0	

Comments:			
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		nalytical Services/Reddin or mg/kg): <u>UG/L</u>		od Blank ID: M1218	W01	
b Samp	le ID: <u>M1218W</u>	701				
itial Cali	bration ID: 12/0	05/06MSM				
	A	nalyte	MDL	Method Blank	RL	Q
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						······································
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	154 PATE AT	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -				
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Limmon		Surrogate	Recovery	Control Limits	Qualifier	7
		robenzene - SS	100	82-124	Quanner	
		romethane - SS	99	84-127		
	Toluene-d8 -	SS	100	80-117		
	<u> </u>					
		Interna	l Standard	Qualifier		
		Fluorobenzene				
		Chlorobenzene-d5	* 4			
		1,4-Dichlorobenzen	e-d4		18.1	

Comments:

Analytical Method: SW8260	AAB #:D0602089
Lab Name: Columbia Analytical Services/Redding	<del></del>
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1220W01
Lab Sample ID: M1220W01	
Initial Calibration ID: 12/05/06MSM	

Analyte	MDL	Method Blank	RL	Q
Dichlorodifluoromethane	0.36	ND	5.0	***************************************
Chloromethane	0.23	ND	5.0	
Vinyl chloride	0.22	ND	1.0	
Bromomethane	0.27	ND	1.0	
Chloroethane	0.20	ND	5.0	
Trichlorofluoromethane	0.14	ND	5.0	
1,1-Dichloroethene	0.19	ND	2.0	
Acetone	1.0	ND	20	
Carbon disulfide	0.11	ND	5.0	
Methylene chloride	0.15	ND	5.0	
Iodomethane	0.20	ND	10	
trans-1,2-Dichloroethene	0.16	ND	2.0	
Tert-butylmethylether	0.17	ND	1.0	
1,1-Dichloroethane	0.12	ND	2.0	
Vinyl acetate	0.84	ND	25	
2,2-Dichloropropane	0.33	ND	2.0	
cis-1,2-Dichloroethene	0.17	ND	2.0	
2-Butanone	0.90	ND	10	100
Bromochloromethane	0.25	ND	5.0	
Chloroform	0.14	ND	2.0	
1,1,1-Trichloroethane	0.14	ND	2.0	
1,1-Dichloropropene	0.18	ND	2.0	
Carbon tetrachloride	0.18	ND	2.0	
Benzene	0.12	ND	1.0	
1,2-Dichloroethane	0.18	ND	1.0	
Trichloroethene	0.10	ND	1.0	
1,2-Dichloropropane	0.17	ND	2.0	
Dibromomethane	0.18	ND	2.0	
Bromodichloromethane	0.17	ND	1.0	
cis-1,3-Dichloropropene	0.13	ND	2.0	
4-methyl-2-pentanone	0.85	ND	10	
Toluene	0.14	ND	2.0	
trans-1,3-Dichloropropene	0.19	ND	2.0	

Comments:		
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Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	-
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1220W01
Lab Sample ID: M1220W01	

Initial Calibration ID: 12/05/06MSM

Analyte	MDL	Method Blank	RL	Q
1,1,2-Trichloroethane	0.22	ND	1.0	
Tetrachloroethene	0.22	ND	1.0	
1,3-Dichloropropane	0.11	ND	2.0	
2-Hexanone	0.58	ND	10	
Dibromochloromethane	0.15	ND	2.0	
1,2-Dibromoethane	0.15	ND	2.0	
Chlorobenzene	0.15	ND	1.0	
1,1,1,2-Tetrachloroethane	0.23	ND	5.0	
Ethylbenzene	0.15	ND	2.0	
Xylene (total)	0.14	ND	10	
Styrene	0.16	ND	2.0	
Bromoform	0.18	ND	5.0	
Isopropylbenzene	0.17	ND	2.0	
1,1,2,2-Tetrachloroethane	0.17	ND	1.0	
Bromobenzene	0.17	ND	5.0	
1,2,3-Trichloropropane	0.20	ND	10	
n-Propylbenzene	0.13	ND	2.0	·
2-Chlorotoluene	0.16	ND	5.0	
1,3,5-Trimethylbenzene	0.15	ND	2.0	
4-Chlorotoluene	0.16	ND	5.0	
tert-Butylbenzene	0.18	ND	5.0	
1,2,4-Trimethylbenzene	0.13	ND	2.0	
sec-Butylbenzene	0.17	ND	5.0	
1,3-Dichlorobenzene	0.11	ND	1.0	
p-Isopropyltoluene	0.10	ND	2.0	
1,4-Dichlorobenzene	0.11	ND	1.0	
n-Butylbenzene	0.33	ND	5.0	
1,2-Dichlorobenzene	0.14	ND	1.0	
1,2-Dibromo-3-chloropropane	0.81	ND	5.0	
1,2,4-Trichlorobenzene	0.36	ND	5.0	
Hexachlorobutadiene	0.60	ND	1.0	
Naphthalene	0.29	ND	2.0	
1,2,3-Trichlorobenzene	0.37	ND	5.0	

Comments:			

Analytical	Method: SW8260		AAB #: _	D0602	2089			
Lab Name: Columbia Analytical Services/Redding								
Concentrati	Concentration Units (ug/L or mg/kg): UG/L Method Blank ID: M1220W01						)1	
Lab Sample	e ID: <u>M1220W01</u>							
Initial Calib	oration ID: 12/05/	/06MSM						
	Ana	lyte	MDL	Met	thod Blank		RL	Q
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	The second secon							
		rogate	Recovery		Control Limi	ts	Qualifie	r
	4-Bromofluorob		92		82-124			
	Dibromofluoron Toluene-d8 - SS		90 89	_	84-127 80-117	-		
	20,40110 40 50					1		
		Internal	Standard		Qualifier	. 7		
		Internal Standard Fluorobenzene			Quanner			
	Chlorobenzene-d5							
	1,4-Dichlorobenzene-d							
Comments:								

Analytical Method: Sw8260	AAB#: <u>D0602089</u>	
Lab Name: Columbia Analytical	Services/Redding	
LCS ID: M1218W01LCS	Concentration Units (ug/L or mg/kg): UG/L	
Date Extracted:	Date Analyzed: 12/18/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	12.1	121	27-158	
Chloromethane	10.0	10.8	108	51-137	
Vinyl chloride	10.0	10.7	107	57-137	
Bromomethane	10.0	11.5	115	44-156	
Chloroethane	10.0	11.3	113	60-140	-
Trichlorofluoromethane	10.0	12.3	123	54-146	.,
1,1-Dichloroethene	10.0	11.0	110	70-130	
Acetone	50.0	43.4	87	55-137	
Carbon disulfide	10.0	10.0	100	50-127	
Methylene chloride	10.0	9.8	98	73-121	
Iodomethane	10.0	9.6	96	50-150	E4
trans-1,2-Dichloroethene	10.0	9.8	98	74-124	
Tert-butylmethylether	10.0	10.0	100	75-119	
1,1-Dichloroethane	10.0	9.9	99	78-121	
Vinyl acetate	10.0	11.1	111	52-129	E4
2,2-Dichloropropane	10.0	9.9	99	61-137	
cis-1,2-Dichloroethene	10.0	10.3	103	80-118	
2-Butanone	50.0	47.0	94	76-122	
Bromochloromethane	10.0	10.3	103	82-118	
Chloroform	10.0	10.1	101	73-125	
1,1,1-Trichloroethane	10.0	10.0	100	76-124	
1,1-Dichloropropene	10.0	10.2	102	80-119	
Carbon tetrachloride	10.0	10.7	107	68-135	
Benzene	10.0	10.2	102	81-119	
1,2-Dichloroethane	10.0	9.8	98	75-122	
Trichloroethene	10.0	9.9	99	79-118	
1,2-Dichloropropane	10.0	9.6	96	82-115	
Dibromomethane	10.0	10.1	101	84-116	
Bromodichloromethane	10.0	10.5	105	81-122	
cis-1,3-Dichloropropene	10.0	10.3	103	78-118	
4-methyl-2-pentanone	50.0	49.4	99	81-127	
Toluene	10.0	10.0	100	83-116	
trans-1,3-Dichloropropene	10.0	10.5	105	73-122	<del></del>

Comments:		
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Analytical Method: SW8260	AAB #: <u>D0602089</u>	-	
Lab Name: Columbia Analytical Ser	vices/Redding		
LCS ID: M1218W01LCS	Concentration Units (ug/L or mg/kg):	UG/L	
Date Extracted:	Date Analyzed: 12/18/06		

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	10.2	102	83-120	
Tetrachloroethene	10.0	10.7	107	82-118	
1,3-Dichloropropane	10.0	10.3	103	82-119	
2-Hexanone	50.0	48.9	98	81-130	
Dibromochloromethane	10.0	11.3	113	79-124	
1,2-Dibromoethane	10.0	10.6	106	82-116	
Chlorobenzene	10.0	10.3	103	86-114	
1,1,1,2-Tetrachloroethane	10.0	10.7	107	79-122	
Ethylbenzene	10.0	10.4	104	86-116	-
Xylene (total)	30.0	31.1	104	85-117	-
Styrene	10.0	10.4	104	84-119	
Bromoform	10.0	11.0	110	71-133	
Isopropylbenzene	10.0	10.7	107	77-117	
1,1,2,2-Tetrachloroethane	10.0	10.7	107	80-117	
Bromobenzene	10.0	10.5	105	84-120	
1,2,3-Trichloropropane	10.0	10.5	105	81-122	
n-Propylbenzene	10.0	10.5	105	87-117	
2-Chlorotoluene	10.0	10.6	106	87-119	
1,3,5-Trimethylbenzene	10.0	9.8	98	83-120	
4-Chlorotoluene	10.0	10.4	104	86-118	
tert-Butylbenzene	10.0	10.7	107	82-122	
1,2,4-Trimethylbenzene	10.0	10.4	104	86-121	
sec-Butylbenzene	10.0	10.8	108	84-128	
1,3-Dichlorobenzene	10.0	10.4	104	85-119	
p-Isopropyltoluene	10.0	10.3	103	84-121	
1,4-Dichlorobenzene	10.0	10.3	103	84-118	
n-Butylbenzene	10.0	9.6	96	81-123	
1,2-Dichlorobenzene	10.0	10.3	103	85-117	
1,2-Dibromo-3-chloropropane	40.0	40.8	102	67-121	
1,2,4-Trichlorobenzene	10.0	9.6	96	69-128	
Hexachlorobutadiene	10.0	10.0	100	71-135	
Naphthalene	10.0	9.9	99	60-131	
1,2,3-Trichlorobenzene	10.0	9.6	96	69-130	

Comments:		

Analytical	Method: SW826	50	AAE	3 #: <u>D0602</u>	089	·	
Lab Name	e: Columbia Ana	alytical Services/Red	lding				
LCS ID:	M1218W01LCS	Conce	ntration Units (	(ug/L or mg.	/kg): <u>UG/L</u>	and the same of th	
Date Extra	acted:	Date An	alyzed: 12/18	/06			
Initial Cal	ibration ID: 12/0	5/06MSM					
	Analyte	;	Expected	Found	%R	Control Limits	Q
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L			<u> </u>				
		rogate	Recover	y Co	ontrol Limits	Qualifier	
	4-Bromofluorob  Dibromofluoron		105		82-124 84-127		
	Toluene-d8 - SS		102		80-117		
		Intern	al Standard		Qualifier		
		Fluorobenzene		·			
		Chlorobenzene-d5					
		1,4-Dichlorobenze	ne-u4				
Comment	s:						
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Analytical Method: SW8260	AAB #: _D0602089	
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1218W01LCSD	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/18/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	11.5	115	27-158	
Chloromethane	10.0	10.4	104	51-137	
Vinyl chloride	10.0	10.4	104	57-137	
Bromomethane	10.0	11.2	112	44-156	
Chloroethane	10.0	10.6	106	60-140	
Trichlorofluoromethane	10.0	12.1	121	54-146	
1,1-Dichloroethene	10.0	11.1	111	70-130	
Acetone	50.0	43.4	87	55-137	
Carbon disulfide	10.0	9.9	99	50-127	
Methylene chloride	10.0	9.6	96	73-121	
Iodomethane	10.0	9.4	94	50-150	E4
trans-1,2-Dichloroethene	10.0	9.8	98	74-124	
Tert-butylmethylether	10.0	9.8	98	75-119	
1,1-Dichloroethane	10.0	9.8	98	78-121	
Vinyl acetate	10.0	10.9	109	52-129	E4
2,2-Dichloropropane	10.0	9.8	98	61-137	
cis-1,2-Dichloroethene	10.0	10.4	104	80-118	
2-Butanone	50.0	46.9	94	76-122	
Bromochloromethane	10.0	9.9	99	82-118	
Chloroform	10.0	10.0	100	73-125	
1,1,1-Trichloroethane	10.0	9.9	99	76-124	-
1,1-Dichloropropene	10.0	9.9	99	80-119	
Carbon tetrachloride	10.0	10.3	103	68-135	
Benzene	10.0	10.1	101	81-119	
1,2-Dichloroethane	10.0	9.5	95	75-122	
Trichloroethene	10.0	9.9	99	79-118	
1,2-Dichloropropane	10.0	9.7	97	82-115	
Dibromomethane	10.0	9.9	99	84-116	
Bromodichloromethane	10.0	10.2	102	81-122	
cis-1,3-Dichloropropene	10.0	10.3	103	78-118	
4-methyl-2-pentanone	50.0	49.2	98	81-127	
Toluene	10.0	10.0	100	83-116	
trans-1,3-Dichloropropene	10.0	10.0	100	73-122	

Comments:	

Analytical Method: SW8260	AAB #: <u>D0602089</u>	
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1218W01LCSD	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/18/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	10.0	100	83-120	
Tetrachloroethene	10.0	10.4	104	82-118	
1,3-Dichloropropane	10.0	9.8	98	82-119	
2-Hexanone	50.0	48.4	97	81-130	
Dibromochloromethane	10.0	10.9	109	79-124	
1,2-Dibromoethane	10.0	10.2	102	82-116	
Chlorobenzene	10.0	10.2	102	86-114	
1,1,1,2-Tetrachloroethane	10.0	10.3	103	79-122	
Ethylbenzene	10.0	10.4	104	86-116	
Xylene (total)	30.0	30.9	103	85-117	
Styrene	10.0	10.3	103	84-119	
Bromoform	10.0	10.3	103	71-133	
Isopropylbenzene	10.0	10.6	106	77-117	
1,1,2,2-Tetrachloroethane	10.0	9.9	99	80-117	
Bromobenzene	10.0	10.2	102	84-120	
1,2,3-Trichloropropane	10.0	9.7	97	81-122	<b>E4</b>
n-Propylbenzene	10.0	10.4	104	87-117	
2-Chlorotoluene	10.0	10.3	103	87-119	
1,3,5-Trimethylbenzene	10.0	10.4	104	83-120	
4-Chlorotoluene	10.0	10.4	104	86-118	
tert-Butylbenzene	10.0	8.9	89	82-122	
1,2,4-Trimethylbenzene	10.0	10.4	104	86-121	
sec-Butylbenzene	10.0	10.9	109	84-128	
1,3-Dichlorobenzene	10.0	10.2	102	85-119	
p-Isopropyltoluene	10.0	10.4	104	84-121	
1,4-Dichlorobenzene	10.0	10.2	102	84-118	
n-Butylbenzene	10.0	10.1	101	81-123	
1,2-Dichlorobenzene	10.0	10.2	102	85-117	
1,2-Dibromo-3-chloropropane	40.0	39.2	98	67-121	
1,2,4-Trichlorobenzene	10.0	10.4	104	69-128	
Hexachlorobutadiene	10.0	10.5	105	71-135	
Naphthalene	10.0	10.7	107	60-131	
1,2,3-Trichlorobenzene	10.0	10.6	106	69-130	

Comments:	

Analytica	l Method: SW82	60	AAE	8#: <u>D0602</u>	089		
Lab Name	e: Columbia An	alytical Services/Re	dding				
LCS ID:	M1218W01LCSI	O Conc	entration Units (	ug/L or mg	/kg): <u>UG/L</u>		
Date Extr	acted:	Date A	nalyzed: 12/18	/06			
	libration ID: 12/0						
	Analyte	2	Expected	Found	%R	Control Limits	Q
						-	
		***************************************					
		·					
	Sur	rogate	Recovery	y Co	ontrol Limits	Qualifier	·
	4-Bromofluorob		102		82-124		
	Dibromofluoromethane - SS		101		84-127		
	Toluene-d8 - SS	·	102		80-117		
	Annual Commence of the Commenc	Interi	nal Standard		Qualifier		
	Fluorobenzene Chlorobenzene-d5				Z		
	•	1,4-Dichlorobenz	ene-d4				
Comment	S:						
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Analytical Method: SW8260	AAB #: <u>D0602089</u>
Lab Name: Columbia Analytical Ser	vices/Redding
LCS ID: M1220W01LCS	Concentration Units (ug/L or mg/kg): UG/L
Date Extracted:	Date Analyzed: 12/20/06

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	12.5	125	27-158	
Chloromethane	10.0	10.8	108	51-137	
Vinyl chloride	10.0	10.8	108	57-137	
Bromomethane	10.0	11.1	111	44-156	
Chloroethane	10.0	11.0	110	60-140	
Trichlorofluoromethane	10.0	12.8	128	54-146	
1,1-Dichloroethene	10.0	- 11.2	112	70-130	
Acetone	50.0	49.0	98	55-137	-
Carbon disulfide	10.0	10.3	103	50-127	
Methylene chloride	10.0	10.1	101	73-121	
Iodomethane	10.0	10.0	100	50-150	
trans-1,2-Dichloroethene	10.0	10.1	101	74-124	
Tert-butylmethylether	10.0	10.4	104	75-119	
1,1-Dichloroethane	10.0	9.9	99	78-121	
Vinyl acetate	10.0	11.7	117	52-129	E4
2,2-Dichloropropane	10.0	10.4	104	61-137	
cis-1,2-Dichloroethene	10.0	10.5	105	80-118	
2-Butanone	50.0	50.6	101	76-122	
Bromochloromethane	10.0	10.3	103	82-118	
Chloroform	10.0	10.0	100	73-125	
1,1,1-Trichloroethane	10.0	10.0	100	76-124	
1,1-Dichloropropene	10.0	10.3	103	80-119	
Carbon tetrachloride	10.0	10.6	106	68-135	
Benzene	10.0	10.4	104	81-119	
1,2-Dichloroethane	10.0	10.2	102	75-122	
Trichloroethene	10.0	10.2	102	79-118	
1,2-Dichloropropane	10.0	9.9	99	82-115	
Dibromomethane	10.0	10.4	104	84-116	
Bromodichloromethane	10.0	10.6	106	81-122	
cis-1,3-Dichloropropene	10.0	10.7	107	78-118	
4-methyl-2-pentanone	50.0	51.9	104	81-127	
Toluene	10.0	10.2	102	83-116	
trans-1,3-Dichloropropene	10.0	10.6	106	73-122	

Comments:		

Analytical Method: SW8260	AAB #:D0602089	
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1220W01LCS	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/20/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	10.4	104	83-120	
Tetrachloroethene	10.0	11.0	110	82-118	
1,3-Dichloropropane	10.0	10.5	105	82-119	
2-Hexanone	50.0	51.2	102	81-130	
Dibromochloromethane	10.0	11.2	112	79-124	
1,2-Dibromoethane	10.0	10.7	107	82-116	
Chlorobenzene	10.0	10.5	105	86-114	
1,1,1,2-Tetrachloroethane	10.0	10.7	107	79-122	
Ethylbenzene	10.0	10.6	106	86-116	
Xylene (total)	30.0	31.6	105	85-117	
Styrene	10.0	10.8	108	84-119	
Bromoform	10.0	10.7	107	71-133	
Isopropylbenzene	10.0	10.9	109	77-117	
1,1,2,2-Tetrachloroethane	10.0	11.0	110	80-117	
Bromobenzene	10.0	11.2	112	84-120	
1,2,3-Trichloropropane	10.0	10.9	109	81-122	
n-Propylbenzene	10.0	11.1	111	87-117	
2-Chlorotoluene	10.0	11.0	110	87-119	
1,3,5-Trimethylbenzene	10.0	10.9	109	83-120	
4-Chlorotoluene	10.0	10.9	109	86-118	
tert-Butylbenzene	10.0	11.0	110	82-122	,
1,2,4-Trimethylbenzene	10.0	10.8	108	86-121	
sec-Butylbenzene	10.0	11.2	112	84-128	
1,3-Dichlorobenzene	10.0	10.8	108	85-119	
p-Isopropyltoluene	10.0	10.6	106	84-121	
1,4-Dichlorobenzene	10.0	10.7	107	84-118	
n-Butylbenzene	10.0	10.1	101	81-123	
1,2-Dichlorobenzene	10.0	10.8	108	85-117	
1,2-Dibromo-3-chloropropane	40.0	42.6	106	67-121	
1,2,4-Trichlorobenzene	10.0	10.4	104	69-128	
Hexachlorobutadiene	10.0	10.0	100	71-135	
Naphthalene	10.0	10.9	109	60-131	
1,2,3-Trichlorobenzene	10.0	10.5	105	69-130	

Comments:		
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AAB #: D0602089

Analytical Method: SW8260

ite Extr	acted:	Date An	alyzed: 12/20	/06			
	libration ID: 12/0						
	Analyto	e	Expected	Found	%R	Control Limits	Q
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	Su	rrogate	Recover	у	Control Limits	Qualifier	. 4
	4-Bromofluorol		109		82-124		
	Dibromofluoror	nethane - SS	103		84-127		
	Toluene-d8 - SS	3	101		80-117		
		T	al C4a-rda-rd	·	01:6	1	
			al Standard		Qualifier	-	
		Fluorobenzene Chlorobenzene-d5				-	
		1,4-Dichlorobenze	d4			<b></b>	
		1,4-Diciliorobelize	ne-u4				
mment	·s.						
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Analytical Method: SW8260	AAB #: <u>D0602089</u>	
Lab Name: Columbia Analytical Serv	vices/Redding	
LCS ID: M1220W01LCSD	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/20/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	11.7	117	27-158	
Chloromethane	10.0	10.2	102	51-137	
Vinyl chloride	10.0	10.4	104	57-137	
Bromomethane	10.0	10.6	106	44-156	
Chloroethane	10.0	10.5	105	60-140	
Trichlorofluoromethane	10.0	11.6	116	54-146	
1,1-Dichloroethene	10.0	10.8	108	70-130	
Acetone	50.0	47.1	94	55-137	
Carbon disulfide	10.0	9.8	98	50-127	
Methylene chloride	10.0	9.8	98	73-121	
Iodomethane	10.0	9.4	94	50-150	E4
trans-1,2-Dichloroethene	10.0	9.6	96	74-124	
Tert-butylmethylether	10.0	9.9	99	75-119	
1,1-Dichloroethane	10.0	9.7	97	78-121	
Vinyl acetate	10.0	11.0	110	52-129	E4
2,2-Dichloropropane	10.0	9.8	98	61-137	
cis-1,2-Dichloroethene	10.0	10.3	103	80-118	
2-Butanone	50.0	47.0	94	76-122	
Bromochloromethane	10.0	10.0	100	82-118	
Chloroform	10.0	9.6	96	73-125	
1,1,1-Trichloroethane	10.0	9.6	96	76-124	
1,1-Dichloropropene	10.0	10.0	100	80-119	
Carbon tetrachloride	10.0	10.2	102	68-135	
Benzene	10.0	10.2	102	81-119	
1,2-Dichloroethane	10.0	9.6	96	75-122	
Trichloroethene	10.0	10.0	100	79-118	
1,2-Dichloropropane	10.0	9.5	95	82-115	
Dibromomethane	10.0	9.9	99	84-116	
Bromodichloromethane	10.0	10.0	100	81-122	
cis-1,3-Dichloropropene	10.0	10.2	102	78-118	
4-methyl-2-pentanone	50.0	48.8	98	81-127	
Toluene	10.0	10.0	100	83-116	
trans-1,3-Dichloropropene	10.0	10.1	101	73-122	

Comments:		
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Analytical Method: SW8260	AAB #: <u>D0602089</u>	
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1220W01LCSD	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/20/06	

Initial Calibration ID: 12/05/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	10.1	101	83-120	
Tetrachloroethene	10.0	10.6	106	82-118	
1,3-Dichloropropane	10.0	10.1	101	82-119	
2-Hexanone	50.0	47.7	95	81-130	
Dibromochloromethane	10.0	10.6	106	79-124	
1,2-Dibromoethane	10.0	10.4	104	82-116	
Chlorobenzene	10.0	10.3	103	86-114	
1,1,1,2-Tetrachloroethane	10.0	10.2	102	79-122	
Ethylbenzene	10.0	10.4	104	86-116	·
Xylene (total)	30.0	30.9	103	85-117	
Styrene	10.0	10.3	103	84-119	
Bromoform	10.0	10.0	100	71-133	
Isopropylbenzene	10.0	10.6	106	77-117	
1,1,2,2-Tetrachloroethane	10.0	10.3	103	80-117	
Bromobenzene	10.0	10.3	103	84-120	
1,2,3-Trichloropropane	10.0	9.8	98	81-122	<b>E</b> 4
n-Propylbenzene	10.0	10.4	104	87-117	
2-Chlorotoluene	10.0	10.4	104	87-119	
1,3,5-Trimethylbenzene	10.0	10.4	104	83-120	
4-Chlorotoluene	10.0	10.3	103	86-118	·
tert-Butylbenzene	10.0	10.5	105	82-122	
1,2,4-Trimethylbenzene	10.0	10.4	104	86-121	
sec-Butylbenzene	10.0	10.8	108	84-128	
1,3-Dichlorobenzene	10.0	10.2	102	85-119	
p-Isopropyltoluene	10.0	10.4	104	84-121	
1,4-Dichlorobenzene	10.0	10.3	103	84-118	
n-Butylbenzene	10.0	9.8	98	81-123	
1,2-Dichlorobenzene	10.0	10.2	102	85-117	
1,2-Dibromo-3-chloropropane	40.0	38.3	96	67-121	
1,2,4-Trichlorobenzene	10.0	10.0	100	69-128	
Hexachlorobutadiene	10.0	10.3	103	71-135	
Naphthalene	10.0	10.4	104	60-131	
1,2,3-Trichlorobenzene	10.0	9.8	98	69-130	

Comments:		
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Analytica	l Method: SW82	60	AAB	8#: <u>D</u>	06020	089		
Lab Name	e: Columbia An	alytical Services/Red	lding					
LCS ID:	M1220W01LCSI	O Conce	entration Units (	ug/L o	or mg/	kg): UG/L		
	acted:		nalyzed: <u>12/20/</u>	/06		-	· · · · · · · · · · · · · · · · · · ·	
	libration ID: 12/0				***************************************	<del></del>		
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	Analyte	2	Expected	Fou	na	%R	Control Limits	Q
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	Sur	rogate	Recovery	y	Co	ntrol Limits	Qualifier	
	4-Bromofluorob		103			82-124		
	Dibromofluoron Toluene-d8 - SS	· · · · · · · · · · · · · · · · · · ·	100			84-127 80-117		
	Toluene-us - 55		77			80-117		
		Intern	al Standard	<b>!</b>		Qualifier	1	
		Fluorobenzene					1	
		Chlorobenzene-d5				· · · · · · · · · · · · · · · · · · ·		
		1,4-Dichlorobenze	ne-d4				]	
Comment	g•							
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Analytical Method: SW8260		AAB #: <u>D0602089</u>	)		
Lab Name: Columbia Analytical Services/Redd	ling				
Concentration Units (ug/L or mg/kg): UG/L	-	<del>_</del>	%Solids:		
Parent Field Sample ID: M1218W01	BS ID:	M1218W01LCS	BSD ID:	M1218W01LCS	D

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Dichlorodifluoromethane		10.0	12.1	121	11.5	115	5	20	27-158	
Chloromethane		10.0	10.8	108	10.4	104	4	20	51-137	-
Vinyl chloride		10.0	10.7	107	10.4	104	3	20	57-137	-
Bromomethane		10.0	11.5	115	11.2	112	3	20	44-156	
Chloroethane		10.0	11.3	113	10.6	106	6	20	60-140	
Trichlorofluoromethane		10.0	12.3	123	12.1	121	2	20	54-146	
1,1-Dichloroethene		10.0	11.0	110	11.1	. 111	1	20	70-130	
Acetone		50.0	43.4	87	43.4	87	0	20	55-137	
Carbon disulfide		10.0	10.0	100	9.9	99	1	20	50-127	
Methylene chloride		10.0	9.8	98	9.6	96	2	20	73-121	
1odomethane		10.0	9.6	96	9.4	94	2	20	50-150	<b>E4</b>
trans-1,2-Dichloroethene		10.0	9.8	98	9.8	98	0	20	74-124	
Tert-butylmethylether		10.0	10.0	100	9.8	98	2	20	75-119	
1,1-Dichloroethane		10.0	9.9	99	9.8	98	1	20	78-121	
Vinyl acetate		10.0	11.1	111	10.9	109	2	20	52-129	<b>E4</b>
2,2-Dichloropropane		10.0	9.9	99	9.8	98	1	20	61-137	
cis-1,2-Dichloroethene		10.0	10.3	103	10.4	104	1	20	80-118	
2-Butanone		50.0	47.0	94	46.9	94	0	20 .	76-122	
Bromochloromethane		10.0	10.3	103	9.9	99	4	20	82-118	* *************************************
Chloroform		10.0	10.1	101	10.0	100	1	20	73-125	
1,1,1-Trichloroethane		10.0	10.0	100	9.9	99	1	20	76-124	
1,1-Dichloropropene		10.0	10.2	102	9.9	99	3	20	80-119	
Carbon tetrachloride		10.0	10.7	107	10.3	103	- 4	20	68-135	N 710 7 244 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Benzene		10.0	10.2	102	10.1	101	1	20	81-119	
1,2-Dichloroethane		10.0	9.8	98	9.5	95	3	20	75-122	
Trichloroethene		10.0	9.9	99	9.9	99	0	20	79-118	

Comments:		
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Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Reddi	<u> </u>
Concentration Units (ug/L or mg/kg): UG/L	%Solids:
Parent Field Sample ID: M1218W01	S ID: M1218W01LCS BSD ID: M1218W01LCSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
1,2-Dichloropropane		10.0	9.6	96	9.7	97	1	20	82-115	
Dibromomethane		10.0	10.1	101	9.9	99	2	20	84-116	
Bromodichloromethane		10.0	10.5	105	10.2	102	3	20	81-122	
cis-1,3-Dichloropropene		10.0	10.3	103	10.3	103	0	20	78-118	
4-methyl-2-pentanone		50.0	49.4	99	49.2	98	0	20	81-127	
Toluene		10.0	10.0	100	10.0	100	0	20	83-116	
trans-1,3-Dichloropropene		10.0	10.5	105	10.0	100	5	20	73-122	
1,1,2-Trichloroethane		10.0	10.2	102	10.0	100	. 2	20	83-120	
Tetrachloroethene		10.0	10.7	107	10.4	104	. 3	20	82-118	
1,3-Dichloropropane		10.0	10.3	103	9.8	- 98	5	20	82-119	
2-Hexanone		50.0	48.9	98	48.4	97	1	20	81-130	
Dibromochloromethane		10.0	11.3	113	10.9	109	4	20	79-124	:
1,2-Dibromoethane		10.0	10.6	106	10.2	102	4	20.	82-116	-
Chlorobenzene		10.0	10.3	103	10.2	102	1	20	86-114	
1,1,1,2-Tetrachloroethane		10.0	10.7	107	10.3	103	4	20	79-122	
Ethylbenzene		10.0	10.4	104	10.4	104	0	20	86-116	
Xylene (total)		30.0	31.1	104	30.9	103	1	20	85-117	
Styrene		10.0	10.4	104	10.3	103	1	20	84-119	
Bromoform		10.0	11.0	110	10.3	103	6	20	71-133	
Isopropylbenzene		10.0	10.7	107	10.6	106	1	20	77-117	
1,1,2,2-Tetrachloroethane		10.0	10.7	107	9.9	99	8	20	80-117	
Bromobenzene		10.0	10.5	105	10.2	102	3	20	84-120	
1,2,3-Trichloropropane		10.0	10.5	105	9.7	97	8	20	81-122	<b>E4</b>
n-Propylbenzene		10.0	10.5	105	10.4	104	1	20	87-117	
2-Chlorotoluene		10.0	10.6	106	10.3	103	3	20	87-119	
1,3,5-Trimethylbenzene		10.0	9.8	98	10.4	104	6	20	83-120	

Comments:		

Analytical Method: SW82	60	<u>.                                    </u>	1	AAB #:	D0602089	)	·			
Lab Name: Columbia An	alytical Serv	vices/Redd	ling							
Concentration Units (ug/L	or mg/kg):	UG/L		-		%Sol	ids:			
Parent Field Sample ID: M	1218W01		BS ID:	M1218	3W01LCS		BSD II	D: <u>M1218</u>	3W01LCSI	)
alamana (n. 1918). A series de la companya de la companya de la companya de la companya de la companya de la c	Parent		Spiked		Duplicat	-				
Analyte	Sample Result	Spike Added	Sample Result	%R	Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q .
4-Chlorotoluene		10.0	10.4	104	10.4	104	0	20	86-118	
tert-Butylbenzene		10.0	10.7	107	8.9	89	18	20	82-122	
1,2,4-Trimethylbenzene		10.0	10.4	104	10.4	104	0	20	86-121	
sec-Butylbenzene		10.0	10.8	108	10.9	109	1	20	84-128	
1,3-Dichlorobenzene		10.0	10.4	104	10.2	102	2	20	85-119	
p-Isopropyltoluene		10.0	10.3	103	10.4	104	1	20	84-121	
I,4-Dichlorobenzene		10.0	10.3	103	10.2	102	1	20	84-118	
n-Butylbenzene		10.0	9.6	96	10.1	101	5	20	81-123	
1,2-Dichlorobenzene		10.0	10.3	103	10.2	102	1	20	85-117	
1,2-Dibromo-3-chloropropane		40.0	40.8	102	39.2	98	4	20	67-121	
1,2,4-Trichlorobenzene		10.0	9.6	96	10.4	104	. 8	20	69-128	
Hexachlorobutadiene		10.0	10.0	100	10.5	105	5 -	20	71-135	
Naphthalene		10.0	9.9	99	10.7	107	8	20	60-131	
1,2,3-Trichlorobenzene		10.0	9.6	96	10.6	106	. 10	20	69-130	
										-
,										
										-
Comments:			·							

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	%Solids:
Parent Field Sample ID: M1220W01 BS II	D: M1220W01LCS BSD ID: M1220W01LCSD

And Annual Control of the Control of	Parent		Spiked		Duplicat					
Analyte	Sample	Spike	Sample	%R	Spike	%R	%RPD	Control	Control	Q
	Result	Added	Result		Sample			Limits	Limits	
4					Result			%RPD	%R	
Dichlorodifluoromethane		10.0	12.5	125	11.7	117	7	20	27-158	
Chloromethane		10.0	10.8	108	10.2	102	6	20	51-137	
Vinyl chloride		10.0	10.8	108	10.4	104	4	20	57-137	
Bromomethane		10.0	11.1	111	10.6	106	5	20	44-156	
Chloroethane		10.0	11.0	110	10.5	105	5	20	60-140	
Trichlorofluoromethane		10.0	12.8	128	11.6	116	10	20	54-146	
1,1-Dichloroethene		10.0	11.2	.112	10.8	108	4	20	70-130	
Acetone		50.0	49.0	98	47.1	94	4	20	55-137	
Carbon disulfide		10.0	10.3	103	9.8	98	5	20	50-127	
Methylene chloride		10.0	10.1	101	9.8	98	3	20	73-121	
Iodomethane		10.0	10.0	100	9.4	94	6	20	50-150	E4
trans-1,2-Dichloroethene		10.0	10.1	101	9.6	96	5	20	74-124	
Tert-butylmethylether		10.0	10.4	104	9.9	99	5	20	75-119	***************************************
1,1-Dichloroethane		10.0	9.9	99	9.7	97	2	20	78-121	
Vinyl acetate		10.0	11.7	117	11.0	110	6	20	52-129	E4
2,2-Dichloropropane		10.0	10.4	104	9.8	98	6	20	61-137	· · · · · · · · · · · · · · · · · · ·
cis-1,2-Dichloroethene		10.0	10.5	105	10.3	103	2	20	80-118	
2-Butanone		50.0	50.6	101	47.0	94	7	20	76-122	
Bromochloromethane		10.0	10.3	103	10.0	100	- 3	20	82-118	
Chloroform		10.0	10.0	100	9.6	96	4	20	73-125	
1,1,1-Trichloroethane		10.0	10.0	100	9.6	96	4	20	76-124	
1,1-Dichloropropene		10.0	10.3	103	10.0	100	3	20	80-119	
Carbon tetrachloride	_	10.0	10.6	106	10.2	102	4	20	68-135	
Benzene		10.0	10.4	104	10.2	102	2	20	81-119	
1,2-Dichloroethane		10.0	10.2	102	9.6	96	6	20	75-122	
Trichloroethene		10.0	10.2	102	10.0	100	2	20	79-118	

Comments:			

Analytical Method: SW8260	AAB #: <u>D0602089</u>
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	%Solids:
Parent Field Sample ID: M1220W01 B	SID: M1220W01LCS BSD ID: M1220W01LCSD

	Parent		Spiked		Duplicat					
Analyte	Sample	Spike	Sample	%R	Spike	%R	%RPD	Control	Control	Q
	Result	Added	Result		Sample			Limits	Limits	
					Result			%RPD	%R	
1,2-Dichloropropane		10.0	9.9	99	9.5	95	4	20	82-115	
Dibromomethane		10.0	10.4	104	9.9	99	5	20	84-116	
Bromodichloromethane		10.0	10.6	106	10.0	100	6	20	81-122	
cis-1,3-Dichloropropene		10.0	10.7	107	10.2	102	5	20	78-118	
4-methyl-2-pentanone		50.0	51.9	104	48.8	98	6	20	81-127	
Toluene		10.0	10.2	102	10.0	100	2	20	83-116	
trans-1,3-Dichloropropene	:	10.0	10.6	106	10.1	101	5	20	73-122	
1,1,2-Trichloroethane		10.0	10.4	104	10.1	101	3	20	83-120	
Tetrachloroethene		. 10.0	11.0	110	10.6	106	4	20	82-118	
1,3-Dichloropropane		10.0	10.5	105	10.1	101	4	. 20	82-119	
2-Hexanone		50.0	51.2	102	47.7	95	7	20	81-130	
Dibromochloromethane		10.0	11.2	112	10.6	106	6	20	79-124	
1,2-Dibromoethane		10.0	10.7	107	10.4	104	3	20	82-116	
Chlorobenzene		10.0	10.5	105	10.3	103	2	20	86-114	
1,1,1,2-Tetrachloroethane		10.0	10.7	107	10.2	102	5	20	79-122	
Ethylbenzene		10.0	10.6	106	10.4	104	2	20	86-116	
Xylene (total)		30.0	31.6	105	30.9	103	2	20	85-117	
Styrene		10.0	1,0.8	108	10.3	103	5	20	84-119	
Bromoform		10.0	10.7	107	10.0	100	7	20	71-133	
Isopropylbenzene		10.0	10.9	109	10.6	106	3	20	77-117	
1,1,2,2-Tetrachloroethane		10.0	11.0	110	10.3	103	6	20	80-117	
Bromobenzene		10.0	11.2	112	10.3	103	8	20	84-120	
1,2,3-Trichloropropane		10.0	10.9	109	9.8	98	11	20	81-122	E4
n-Propylbenzene		10.0	11.1	111	10.4	104	6	20	87-117	-
2-Chlorotoluene		10.0	11.0	110	10.4	104	6	20	87-119	***************************************
1,3,5-Trimethylbenzene		10.0	10.9	109	10.4	104	5	20	83-120	

Analytical Method: SW826	60			AAB#:	D0602089	9				
Lab Name: Columbia Ana	lytical Serv	vices/Redd	ing							
Concentration Units (ug/L or	r mg/kg):	UG/L		_		%Soli	ds:			
Parent Field Sample ID: M1	220W01		BS ID:	M1220	W01LCS	<del></del>	BSD II	D: <u>M1220</u>	W01LCSI	
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Chlorotoluene		10.0	10.9	109	10.3	103	6	20	86-118	
t-Butylbenzene	. 40.	10.0	11.0	110	10.5	105	5	20	82-122	, , ,
2,4-Trimethylbenzene		10.0	10.8	108	10.4	104	4	20	86-121	
e-Butylbenzene		10.0	11.2	- 112	10.8	108	4	20	84-128	
3-Dichlorobenzene		10.0	10.8	108	10.2	102	6	20	85-119	
sopropyltoluëne		10.0	10.6	106	10.4	104	- 2	20	84-121	
l-Dichlorobenzene		10.0	10.7	107	10.3	103	4	20	84-118	
Butylbenzene		10.0	10.1	101	9.8	98	3	20	81-123	
-Dichlorobenzene		10.0	10.8	108	10.2	102	6	20	85-117	
2-Dibromo-3-chloropropane		40.0	42.6	106	38.3	96	11	20	67-121	
,4-Trichlorobenzene		10.0	10.4	104	10.0	100	4	20	69-128	
xachlorobutadiene		10.0	10.0	100	10.3	103	3	20	71-135	·····
phthalene		10.0	10.9	109	10.4	104	5	20	60-131	
,3-Trichlorobenzene		10.0	10.5	105	9.8	98	7	20	69-130	
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Comments:						Marine de Marine de Marine de Marine de Marine de Marine de Marine de Marine de Marine de Marine de Marine de M				

# ORGANIC ANALYSES DATA SHEET 9 HOLDING TIMES

Analytical M	Iethod: SW8260	AAB #: _	D0602089
Lab Name:	Columbia Analytical Services/Redding		

			1st	Max.	1st	2nd	Max.	2nd		Max.	Time	Q
Field Sample ID	Date	Date	Date	Holding	Time	Date	Holding	Time	Date	Holding	Held	
	Collected	Received	Prepared	Time 1	Held	Prepared	Time 2	Held	Analyzed	Time A	Anal.	
TB-121306	12/14/06	12/15/06	N/A	N/A	N/A	N/A	N/A	N/A	12/20/06	14	6	
ASE-41A-6D2	12/14/06	12/15/06	N/A	N/A	N/A	N/A	N/A	N/A	12/18/06	14	4	
ASE-92A-6D2	12/14/06	12/15/06	N/A	N/A	N/A	N/A	N/A	N/A	12/18/06	14	4	
ASE-92A-6D2DL	12/14/06	12/15/06	N/A	N/A	N/A	N/A	N/A	N/A	12/20/06	14	6	
ASE-91A-6D2	12/14/06	12/15/06	N/A	N/A	N/A	N/A	N/A	N/A	12/18/06	14	4	
PL-105A-6D2	12/14/06	12/15/06	N/A	N/A	N/A	N/A	N/A	N/A	12/18/06	14	4	
ASE-108A-6D2	12/14/06	12/15/06	N/A	N/A	N/A	N/A	N/A	N/A	12/18/06	14	4	
PL-505-6D2	12/14/06	12/15/06	N/A	N/A	N/A	N/A	N/A	N/A	12/18/06	14	4	
ASE-55A-6D2	12/14/06	12/15/06	N/A	N/A	N/A	N/A	N/A	N/A	12/18/06	14	4	
ASE-62A-6D2	12/14/06	12/15/06	N/A	N/A	N/A	N/A	N/A	N/A	12/18/06	14	4	
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Comments:			
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# ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Metho	d: <u>SW8</u> 2	260	<u>.</u>	AAB#:	D0602089	 	_
Lab Name: <u>Col</u>	umbia Ana	alytical Services	Redding				
Instrument ID #:	MSM	DB-624					

Field Sample ID/Std ID/	Laboratory	Date Analysis	Time Analysis	Date Analysis	Time Analysis
Blank ID/QC Sample ID	File ID	Started	Started	Completed	Completed
VSTD00.5	M065370	12/05/06	1545	12/05/06	1605
VSTD001	M065371	12/05/06	1606	12/05/06	1626
VSTD005	M065372	12/05/06	1628	12/05/06	1648
VSTD010	M065373	12/05/06	1649	12/05/06	1709
VSTD020	M065374	12/05/06	1711	12/05/06	1731
VSTD050	M065375	12/05/06	1732	12/05/06	1752
VSTD100	M065376	12/05/06	1754	12/05/06	1814
VSTD150	M065377	12/05/06	1815	12/05/06	1835
QCALTSTD4	M065380	12/05/06	1920	12/05/06	1940
VSTD10M	M065584	12/18/06	1141	12/18/06	1201
M1218W01LCS	M065585A	12/18/06	1202	12/18/06	1222
M1218W01LCSD	M065586A	12/18/06	1224	12/18/06	1244
M1218W01	M065589A	12/18/06	1328	12/18/06	1348
ASE-92A-6D2	M065607	12/18/06	2017	12/18/06	2037
ASE-108A-6D2	M065608	12/18/06	2038	12/18/06	2058
PL-505-6D2	M065609	12/18/06	2059	12/18/06	2119
ASE-62A-6D2	M065610	12/18/06	2121	12/18/06	2141
ASE-41A-6D2	M065611	12/18/06	2142	12/18/06	2202
ASE-91A-6D2	M065612	12/18/06	2204	12/18/06	2224
PL-105A-6D2	M065613	12/18/06	2225	12/18/06	2245
ASE-55A-6D2	M065614	12/18/06	2247	12/18/06	2307
VSTD10M	M065627	12/20/06	1147	12/20/06	1207
M1220W01LCS	M065628	12/20/06	1209	12/20/06	1229
M1220W01LCSD	M065629	12/20/06	1230	12/20/06	1250
M1220W01	M065632	12/20/06	1334	12/20/06	1354
TB-121306	M065634	12/20/06	1520	12/20/06	1540

Comments:		
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# ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: SW8260	)	AAB #:D06	502089	-	
Lab Name: Columbia Analy	tical Services/Redding				
Instrument ID #: MSM	DB-624				
	000				
Field Sample ID/Std ID/	Laboratory	Date Analysis	Time Analysis	Date Analysis	Time Analysis
Blank ID/QC Sample ID	File ID	Started	Started	Completed	Completed
ASE-92A-6D2DL	M065637	12/20/06	1624	12/20/06	1644
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# ORGANIC ANALYSES DATA SHEET APPENDIX A SURROGATE RESULTS

Analytical Method: SW826	50		AA	AB #: <u>D0</u>	602089				
Lab Name: Columbia Ana	alytical Servi	ces/Reddir	ıg	· 					
Matrix: Water									
Field/QC Sample ID	S1	S2	S3	S4	S5	S6	S7	S8	Q
M1218W01LCS	105	102	102			<u> </u>			
M1218W01LCSD	102	101	102		<u> </u>				<u> </u>
M1218W01	100	. 99	100						
ASE-92A-6D2	102	99	99						
ASE-108A-6D2	103	99	101						
PL-505-6D2	100	- 98	98						
ASE-62A-6D2	101	100	102						
ASE-41A-6D2	99	100	96					<del></del>	
ASE-91A-6D2	103	99	98						
PL-105A-6D2	101	98	100			1			
ASE-55A-6D2	104	100	99						
M1220W01LCS	109	103	101						
M1220W01LCSD	103	100	99						
M1220W01	92	90	89		***************************************				
TB-121306	104	102	95						
ASE-92A-6D2DL	100	95	97						
			-						

S1:	4-Bromofluorobenzene - SS	82-124
S2:	Dibromofluoromethane - SS	84-127
S3:	Toluene-d8 - SS	80-117

Comments:	
	-
	 -



December 29, 2006

Service Request No: D0602091

Shane Lowe CH2M Hill 2625 S. Plaza Drive Suite 300 Tempe, AZ 85282

RE: Sky Harbor/2959482

Dear Shane:

Enclosed are the results of the sample(s) submitted to our laboratory on December 16, 2006. For your reference, these analyses have been assigned our service request number D0602091.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 105. You may also contact me via email at MFesler@redding.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Mark Fesler

**Project Chemist** 

CC: Terri Krauss

Page 1 of 92

## **Current CAS Redding Accreditation Programs**

## Federal and National Programs

- U.S Air Force, Air Force Center for Environmental Excellence (AFCEE)
  Approved laboratory for Wastewater and Hazardous Waste
- U.S. Army Corps of Engineers MRD, HTRW Mandatory Center of Expertise Validated for Wastewater and Hazardous Waste
- Department of the Navy, Naval Facilities Engineering Service Center (NFESC)
   Approved laboratory for Wastewater and Hazardous Waste

### State and Local Programs

- State of Alaska, Department of Environmental Conservation Approved Laboratory for Contaminated Sites Lab ID UST-001
- State of Arizona, Department of Health Services, Office of Laboratory Licensure
   Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste
   Lab ID AZ0604
- State of California, Department of Health Services, National Environmental Laboratory Accreditation Program (NELAP)

Approved Laboratory for Drinking Water, Wastewater and Hazardous Waste Lab ID 01105CA

- Los Angeles County Sanitation District Approved Laboratory for Wastewater Lab ID 10243
- State of California, Department of Health Services, Environmental Laboratory Accreditation Program (ELAP)

Approved Laboratory for Microbiology of Drinking Water and Wastewater Lab ID 2635

- State of Florida, Department of Health, Bureau of Laboratories (NELAP)
   Approved Environmental Testing Laboratory for Wastewater and Hazardous Waste Lab ID E87203
- State of Kansas, Department of Health and Environment (NELAP)

  Approved Laboratory for Hazardous Waste

Lab ID E-10323

- State of Massachusetts, Department of Environmental Protection
   Approved laboratory for Drinking Water and Wastewater
   Lab ID M-CA025
- State of Oklahoma, Department of Environmental Quality
   Approved Laboratory for General Water Quality/Sludge Testing Lab ID 9952
- State of Oregon, Environmental Laboratory Accreditation Program (ORELAP)
   Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste
   Lab ID CA200004
- State of Utah, Department of Health, Bureau of Laboratory Improvement (NELAP)
   Approved Laboratory for Wastewater and Hazardous Waste
   Lab ID QUAL1
- State of Washington, Department of Ecology

Approved Laboratory for Wastewater and Hazardous Waste Lab ID C1234

State of Wisconsin, Department of Natural Resources
 Approved Laboratory for Wastewater and Hazardous Waste
 Lab ID 999767340

## Arizona Data Qualifiers

Revision 2.0, 11/26/2003

# Developed by the Sub-committee of the Arizona Environmental Laboratory Advisory Committee

#### Microbiology:

- A1 = Too numerous to count.
- A2 = Sample incubation period exceeded method requirement.
- A3 = Sample incubation period was shorter than method requirement.
- A4 = Target organism detected in associated method blank.
- A5 = Incubator/water bath temperature was outside method requirements.
- A6 = Target organism not detected in associated positive control.
- A7 = Micro sample received without adequate headspace.

#### Method/calibration blank:

- B1 = Target analyte detected in method blank at or above the method reporting limit.
- B2 = Non-target analyte detected in method blank and sample, producing interference.
- B3 = Target analyte detected in calibration blank at or above the method reporting limit.
- B4 = Target analyte detected in blank at/above method acceptance criteria.
- B5 = Target analyte detected in method blank at or above the method reporting limit, but below trigger level or MCL.
- B6 = Target analyte detected in calibration blank at or above the method reporting limit, but below trigger level or MCL.
- B7 = Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above the concentration found in the method blank.

#### Confirmation:

- C1 = Confirmatory analysis not performed as required by the method.
- C3 = Qualitative confirmation performed.
- C4 = Confirmatory analysis was past holding time.
- C5 = Confirmatory analysis was past holding time. Original result not confirmed.
- C6 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the higher value was reported as there was no obvious chromatographic interference.
- C7 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic interference.

#### Dilution:

- D1 = Sample required dilution due to matrix.
- D2 = Sample required dilution due to high concentration of target analyte.
- D3 = Sample dilution required due to insufficient sample.
- D4 = Minimum reporting level (MRL) adjusted to reflect sample amount received and analyzed.

#### Estimated concentration:

- E1 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
- E2 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
- E3 = Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to holding time requirements.

## Arizona Data Qualifiers Revision 2.0, 11/26/2003

- E4 = Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL).
- E5 = Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL), but not confirmed by alternate analysis.
- E6 = Concentration estimated. Internal standard recoveries did not meet method acceptance criteria.
- E7 = Concentration estimated. Internal standard recoveries did not meet laboratory acceptance criteria
- E8 = Analyte reported to MDL per project specification. Target analyte was not detected in the sample.

#### Hold time:

- H1 = Sample analysis performed past holding time.
- H2 = Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
- H3 = Sample was received and analyzed past holding time.
- H4 = Sample was extracted past required extraction holding time, but analyzed within analysis holding time.

#### BOD:

- K1 = The sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2 mg/L. Any reported result is an estimated value.
- K2 = The sample dilutions set up for the BOD analysis did not meet the criteria of a residual dissolved oxygen of at least 1 mg/L. Any reported result is an estimated value.
- K4 = The seed depletion was outside the method acceptance limits. The reported result is an estimated value.
- K5 = The dilution water D.O. depletion was > 0.2 mg/L.
- K6 = Glucose/glutamic acid BOD was below method acceptance criteria.
- K7 = A discrepancy between the BOD and COD results has been verified by reanalysis of the sample for COD.
- K8 = Glucose/glutamic acid BOD was above method acceptance levels.

## Laboratory fortified blank/blank spike:

- L1 = The associated blank spike recovery was above laboratory acceptance limits.
- L2 = The associated blank spike recovery was below laboratory acceptance limits.
- L3 = The associated blank spike recovery was above method acceptance limits.
- L4 = The associated blank spike recovery was below method acceptance limits.

#### Matrix spike:

- M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.
- M2 = Matrix spike recovery was low, the method control sample recovery was acceptable.
- M3 = The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
- M4 = The analysis of the spiked sample required a dilution such that the spike concentration was diluted below the reporting limit. The method control sample recovery was acceptable.
- M5 = Analyte concentration was determined by the method of standard addition (MSA).

## Arizona Data Qualifiers Revision 2.0, 11/26/2003

M6 = Matrix spike recovery was high. Data reported per ADEQ policy 0154.000.

M7 = Matrix spike recovery was low. Data reported per ADEQ policy 0154.000.

#### General:

N1 = See case narrative.

N2 = See corrective action report.

N3 = The analysis meets all method requirements. See case narrative.

#### Sample quality:

- Q1 = Sample integrity was not maintained. See case narrative.
- Q2 = Sample received with headspace.
- Q3 = Sample received with improper chemical preservation.
- Q4 = Sample received and analyzed without chemical preservation.
- Q5 = Sample received with inadequate chemical preservation, but preserved by the laboratory.
- Q6 = Sample was received above recommended temperature.
- Q7 = Sample inadequately dechlorinated.
- Q8 = Insufficient sample received to meet method QC requirements. Batch QC requirements satisfies ADEQ policies 0154 and 0155.
- Q9 = Insufficient sample received to meet method QC requirements.
- Q10 = Sample received in inappropriate sample container.
- Q11 = Sample is heterogeneous. Sample homogeneity could not be readily achieved using routine laboratory practices.

#### Duplicates:

- R1 = RPD exceeded the method control limit. See case narrative.
- R2 = RPD exceeded the laboratory control limit. See case narrative.
- R4 = MS/MSD RPD exceeded the method control limit. Recovery met acceptance criteria.
- R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- R6 = LFB/LFBD RPD exceeded the method control limit. Recovery met acceptance criteria.
- R7 = LFB/LFBD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- R8 = Sample RPD exceeded the method control limit.
- R9 = Sample RPD exceeded the laboratory control limit.
- R10 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic problems.
- R11 = The RPD calculation for MS/MSD does not provide useful information due to the varying sample weights when Encore samplers/methanol field preserved samples are used.

#### Surrogate:

- S1 = Surrogate recovery was above laboratory acceptance limits, but within method acceptance limits.
- S3 = Surrogate recovery was above laboratory acceptance limits, but within method acceptance limits. No target analytes were detected in the sample.
- S4 = Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.
- S5 = Surrogate recovery was below laboratory acceptance limits, but within method acceptance limits.
- S6 = Surrogate recovery was below laboratory and method acceptance limits. Reextraction and/or reanalysis confirms low recovery caused by matrix effect.

## Arizona Data Qualifiers Revision 2.0, 11/26/2003

- S7 = Surrogate recovery was below laboratory and method acceptance limits. Unable to confirm matrix effect.
- S8 = The analysis of the sample required a dilution such that the surrogate recovery calculation does not provide any useful information. The method control sample recovery was acceptable.
- S10 = Surrogate recovery was above laboratory and method acceptance limits. See Case narrative.
- S11 = Surrogate recovery was high. Data reported per ADEQ policy 0154.000.
- S12 = Surrogate recovery was low. Data reported per ADEQ policy 0154.000.

### Method/analyte discrepancies:

- T1 = Method approved by EPA, but not yet licensed by ADHS.
- T2 = Cited ADHS licensed method does not contain this analyte as part of method compound list.
- T3 = Method not promulgated either by EPA or ADHS.
- T4 = Tentatively identified compound. Concentration is estimated and based on the closest internal standard.

#### Calibration verification:

- V1 = CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
- V2 = CCV recovery was above method acceptance limits. This target analyte was detected in the sample. The sample could not be reanalyzed due to insufficient sample.
- V3 = CCV recovery was above method acceptance limits. This target analyte was detected in the sample, but the sample was not reanalyzed. See case narrative.
- V4 = CCV recovery was below method acceptance limits. The sample could not be reanalyzed due to insufficient sample.
- V5 = CCV recovery after a group of samples was above acceptance limits. This target analyte was not detected in the sample. Acceptable per EPA Method 8000B.
- V6 = Data reported from one-point calibration criteria per ADEQ policy 0155.000.
- V7 = Calibration verification recovery was above the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
- V8 = Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.

#### Calibration:

- W1 = The % RSD for this compound was above 20%. The average % RSD for all compounds in the calibration met the 20% criteria as specified in EPA method 8000B.
- W2 = The % RSD for this compound was above 15%. The average % RSD for all compounds in the calibration met the 15% criteria as specified in EPA method 8260B/8270C.

Client:

**Project:** Sky Harbor/2959482

Service Request: D0602091

## SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	<u>TIME</u>
D0602091-001	TB-121506	12/15/06	05:50
D0602091-002	ASE-66A-6D2	12/15/06	06:00
D0602091-003	ASE-68A-6D2	12/15/06	00:00
D0602091-004	PL-507-6D2	12/15/06	00:00
D0602091-005	ASE-20A-6D2	12/15/06	08:06
D0602091-006	ASE-51A-6D2	12/15/06	08:55
D0602091-007	ASE-53A-6D2	12/15/06	09:40
D0602091-008	ASE-52A-6D2	12/15/06	10:23
D0602091-009	ASE-65A-6D2	12/15/06	07:29

# **CASE NARRATIVE**

Client:

Honeywell International, Incorporated

Service Request No.: D0602091

Project:

Sky Harbor

Date Received:

12/16/06

Sample Matrix: Aqueous

#### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables.

#### Sample Receipt

9 Aqueous samples were received for analysis at Columbia Analytical Services on 12/16/06.

No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4 degrees Celsius upon receipt at the laboratory.

#### TPH Diesel and Motor Oil by EPA Method 8015B

No anomalies associated with the analysis of these samples were observed.

#### Volatile Organic Compounds by EPA Method 8260B

#### **Laboratory Control Sample Exceptions:**

The spike recoveries of n-Butylbenzene and Hexachlorobutadiene for Laboratory Control Sample (LCS) M1221W01LCS was outside the lower control criterion. The analytes in question were not detected in the associated field samples. The data is flagged to indicate the problem.

#### **Spike Recovery Exceptions:**

The matrix spike recoveries of several analytes for sample ASE 51A-6D2MS/MSD were outside control criteria. No further corrective action was appropriate.

#### **Elevated Method Reporting Limits:**

Samples ASE 51A-6D2 and ASE-52A 6D2 required dilution due to the presence of elevated levels of target analytes. The reporting limits are adjusted to reflect the dilution.

Approved by: Date: 12/25/56

# CHAIN OF CUSTODY DOCUMENTATION

#: 37380-061213A	Page 1 of 1	Lab Use Only	Project No:		Job No.							Lab Sample Numbers																			Company: 767	Company:	Company S
	Pa	3	Pre		101				0	3m,	/3w	Lal									*										1 y co	(S)	Ma , co
	Chain Of Custody / Analysis Request	and a samuel and and and		Site Name: Sky Harbor AZ	Location of Site: Phoenix. AZ					O NS I Zsur ssurbje	se for N Intered S SW826 SW826	3	×	k	15	×	X X X	× ×		×	×	X ~X~~X	×	× * *	X						e/Time: Received by:	Date/Time: Received by: //	Sate Time: Reduced by: My
	Chain Of Cus		VK Referred	Site		ne:					Sample #of Cont.	Maura	BLKWATER WATER 3 X	OW WATER 5		AS C		ВW	Β	GW WATER 5 X	GW WATER (D) X	WATER 5	WATER 5	GW WATER 5 X	32						A & Anna 15 Date/Time:	1/21	Patigles
	<b>M</b> ONGES EL	2		Sampler: M. Wiese	Project Number: 2959460	Analysis Turnaround Time:	24 Hour -	7 Day -	14 Day -	21 Day	Sample Sample Date Time	3 1 1	0 6 15 Dec 13 2006 10 5 550	Dec 13-2006	Dec.13.2006-	/ CDec 13/2006 / こんらた	Z Dec 18 2006		/S Dec+32006 080%	Dec 13 2006	/S Dec,13/2006 O C/C	Dec 13 2006	a,		\$ X250% C 7.8					0 days.	Company:	Company:	Company:
<b>Transwest Geochem</b>	3725 E Atlanta Ave	Phoenix, AZ 85040	Phone 602-437-0330	Client Contact: (name, co., address)	Jennifer Holland	CH2M HILL	2625 South Plaza Dr STE 300	Tempe, AZ 85282	480-377-6287		Samole Identification	Location ID Field Sample ID	TB-124	BC-7A-8D2	27.A				ASE-20A ASE-20A-6D2					ASE-5ZA ASE-5ZA-6DZ						Special Instructions: Standard TAT 10 days.	Relinquished by:	Relinquished by:	Relinquished by:



5090 Caterpillar Road Redding, CA 96003 Phone: (530) 244-5262

## COOLER RECEIPT FORM

Proje	ect/Client: HONEYWELL	Batch No.:	• ``.
1.	Cooler(s)/Sample(s) received on: 12/16/06	Shipped via: UPS	
	Shipping Bill # (s):	# of Coolers/Packages_3_	
2.	Radiological Screening by:	(Acceptable Rej	ected
3.	Custody seals on outside of cooler:  If yes, where? Front Rear Lt Side Rt Side	YES NO	N/A
	Seals intact:	YES NO	
	COOLER/SAMPLE PROCESS	SING	
4.	Sample Processing/Tagging by:		***************************************
5.	Cooler(s)/Sample(s) Temp's: 10C  (or) Temp. Blank (if included):		
6.		ibble Bags Zip Locks Web	bing
	Other:		
7.	Custody papers properly filled out (ink, signed, dated, released, etc.)?	(YES) NO	
8.	Containers arrived in good condition (not broken, leaking, etc.)?	YES NO	
9.	Samples received with adequate holding time remaining to conduct analy	sis? YES NO	i-
10.	Container labels complete (i.e. analysis, preservation, date/time, etc.)?	YES NO	Ar.
11.	Container labels and tags agree with custody papers?	YES NO	
12.	Correct types of containers used for the tests indicated?	YES NO	
	a.) Adequate sample received? If not, note on Exception Report	rt. YES NO	
13.	Containers supplied by:	CAS Oth	er
14.	Preserved containers received with the appropriate preservative?	YES) NO	N/A
	pH: 10 8 (or) See pH log.		
15.	VOA vials free of air bubbles?	YES NO	N/A
16.	Trip Blank preparation date:	CAS Oth	er N/A
17.	Volatile Soil samples: Encores or Plugs in Vials		
	Freezer or GC/MS Da	te:Time:	N/A)

See Exception Report for discrepancies.

Rev. 8/18/2004/ds

## TPH - Diesel and Motor Oil

Client: Project:

Honeywell International, Incorporated Sky Harbor/2959482

Service Request:

D0602091

Cover Page - Organic Analysis Data Package TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name	Lab Code	Date Collected	Date Received
ASE-66A-6D2	D0602091-002	12/15/2006	12/16/2006
ASE-68A-6D2	D0602091-003	12/15/2006	12/16/2006
PL-507-6D2	D0602091-004	12/15/2006	12/16/2006
ASE-20A-6D2	D0602091-005	12/15/2006	12/16/2006
ASE-51A-6D2	D0602091-006	12/15/2006	12/16/2006
ASE-53A-6D2	D0602091-007	12/15/2006	12/16/2006
ASE-52A-6D2	D0602091-008	12/15/2006	12/16/2006
ASE-65A-6D2	D0602091-009	12/15/2006	12/16/2006
ASE-51A-6D2MS	DWG0601084-1	12/15/2006	12/16/2006
ASE-51A-6D2DMS	DWG0601084-2	12/15/2006	12/16/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:	Wida Ang	Name:_	WLDA ANG
Date:	128/06	Title:	Organic Manager

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Water

Service Request: D0602091

Date Collected: 12/15/2006

Date Collected:

**Date Received:** 12/16/2006

### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-66A-6D2

Lab Code:

D0602091-002

Units: ug/L Basis: NA

Extraction Method:

EPA 3510C

Level: Low

Analysis Method:

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	<b>32</b> J	480	20	. 1	12/20/06	12/22/06	E4
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/20/06	12/22/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
ane	65	26-152	12/22/06		
acosane					
ricontane	63	40-140	12/22/06		

Comments:

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SuperSet Reference: RR13374

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Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Water

Service Request: D0602091

Date Collected: 12/15/2006

**Date Received:** 12/16/2006

## TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-68A-6D2

Lab Code:

D0602091-003

Units: ug/L Basis: NA

Extraction Method:

EPA 3510C

Level: Low

Analysis Method:

8015B

Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	1600	480	20	1	12/20/06	12/22/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	1	12/20/06	12/22/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	69	26-152	12/22/06		
Tricontane	67	40-140	12/22/06		

Comments:

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Form 1A - Organic

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SuperSet Reference:

RR13374

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Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Water

Service Request: D0602091

**Date Collected:** 12/15/2006

**Date Received:** 12/16/2006

### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

PL-507-6D2

Lab Code:

D0602091-004

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Analysis Method: 8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed No	te
C10 - C22 DRO (TPH-Diesel) C22 - C32 HRO (TPH-Motor Oil)	<b>2800</b> ND U	480 480	20 30	1	12/20/06 12/20/06	12/22/06 12/22/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	66	26-152	12/22/06		
Tricontane	64	40-140	12/22/06		

Comments:

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Form 1A - Organic

SuperSet Reference:

1 of

RR13374

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Water

Service Request: D0602091

**Date Collected:** 12/15/2006 **Date Received:** 12/16/2006

## TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-20A-6D2

Lab Code:

D0602091-005

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	710	480	20	1	12/20/06	12/22/06	
C22 - C32 HRO (TPH-Motor Oil)	ND U	480	30	. 1	12/20/06	12/22/06	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
Octacosane	69	26-152	12/22/06			
Tricontane	68	40-140	12/22/06			

Comments:

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Form 1A - Organic

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SuperSet Reference: RR13374

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Water

Service Request: D0602091

**Date Collected:** 12/15/2006

**Date Received:** 12/16/2006

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-51A-6D2

Lab Code:

D0602091-006

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

**Analysis Method:** 

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note	
C10 - C22 DRO (TPH-Diesel)	1100	480	20	1	12/20/06	12/23/06		
C22 - C32 HRO (TPH-Motor Oil)	38 J	480	30	1	12/20/06	12/23/06	E4	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Octacosane	66	26-152	12/23/06	
Tricontane	65	40-140	12/23/06	

Comments:

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Form 1A - Organic

Page 1 of

SuperSet Reference: RR13374 1

Analytical Results

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Water

Service Request: D0602091

**Date Collected:** 12/15/2006

Date Received: 12/16/2006

#### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-53A-6D2

Lab Code:

D0602091-007

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Analysis Method:

Level: Low

8015B

Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
C10 - C22 DRO (TPH-Diesel) C22 - C32 HRO (TPH-Motor Oil)	<b>89</b> J ND U	480 480	20 30	1	12/20/06 12/20/06	12/23/06 12/23/06	E4

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
Octacosane	64	26-152	12/23/06			
Tricontane	63	40-140	12/23/06			

Comments:

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Form 1A - Organic

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SuperSet Reference:

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Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Water

Service Request: D0602091

Date Collected: 12/15/2006

**Date Received:** 12/16/2006

#### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-52A-6D2

Lab Code:

D0602091-008

**Extraction Method:** 

EPA 3510C

Units: ug/L Basis: NA

Analysis Method:

8015B

Level: Low

				Dilution	Date	Date	
Analyte Name	Result Q	PQL	MDL	Factor	Extracted	Analyzed	Note
C10 - C22 DRO (TPH-Diesel)	570	480	20	1	12/20/06	12/23/06	
C22 - C32 HRO (TPH-Motor Oil)	<b>30</b> J	480	30	. 1	12/20/06	12/23/06	E4

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Octacosane	65	26-152	12/23/06	-	
Tricontane	63	40-140	12/23/06		

Comments:

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RR13374

Analytical Results

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Water

Service Request: D0602091

**Date Collected: 12/15/2006** 

**Date Received:** 12/16/2006

#### TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-65A-6D2

Lab Code:

D0602091-009

Units: ug/L Basis: NA

**Extraction Method:** 

EPA 3510C

Analysis Method:

8015B

Level: Low

Analyte Name
C10 - C22 DRO (TPH-Diesel)
C22 - C32 HRO (TPH-Motor Oil)

Result	Q	PQL
25	J	480

ND U

MDL	Factor	Extracted	A
20	1	12/20/06	
30	1 -	12/20/06	

Date

Dilution

acted	Analyzed	Note	
0/06	12/23/06	E4	
0/06	12/23/06		

Date

Surrogate Name		%Rec	Control Limits	Date Analyzed	Note		
Octacosane	. '	66	26-152	12/23/06		-	
Tricontane		65	40-140	12/23/06			

480

Comments:

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Form 1A - Organic

Page 1 of

Analytical Results

**Client:** 

Honeywell International, Incorporated

**Project:** Sample Matrix: Sky Harbor/2959482

Water

Service Request: D0602091

Date Collected: NA

Date Received: NA

TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

Method Blank

Lab Code:

Units: ug/L

DWG0601084-4

Basis: NA

Extraction Method:

EPA 3510C

Level: Low

Analysis Method:

8015B

	Analyte Name	Result Q	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note	
C22 - C32 HRO (TPH-Motor Oil) ND U 500 30 1 12/20/06 12/22/06	C10 - C22 DRO (TPH-Diesel) C22 - C32 HRO (TPH-Motor Oil)	ND U ND U	500 500	- +	1		12/22/06 12/22/06		

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
Octacosane	66	26-152	12/22/06			
Tricontane	64	40-140	12/22/06			

Comments:

QA/QC Report

Client:

Honeywell International, Incorporated

**Project:** 

Sky Harbor/2959482

Sample Matrix:

Water

Service Request: D0602091

#### Surrogate Recovery Summary TPH-Diesel / Motor Oil Range Organics by SW8015B

**Extraction Method:** 

EPA 3510C

Units: PERCENT

Analysis Method:

8015B

Level: Low

Lab Code	<u>Sur1</u>	Sur2
D0602091-002	65	63
D0602091-003	69	67
D0602091-004	66	64
D0602091-005	69	68
D0602091-006	66	65
D0602091-007	64	63
D0602091-008	65	63
D0602091-009	66	65
DWG0601084-4	66	64
DWG0601084-1	99	98
DWG0601084-2	99	98
DWG0601084-3	104	103
	D0602091-002 D0602091-003 D0602091-004 D0602091-005 D0602091-006 D0602091-007 D0602091-008 D0602091-009 DWG0601084-4 DWG0601084-1 DWG0601084-2	D0602091-002 65 D0602091-003 69 D0602091-004 66 D0602091-005 69 D0602091-006 66 D0602091-007 64 D0602091-008 65 D0602091-009 66 DWG0601084-4 66 DWG0601084-1 99 DWG0601084-2 99

#### Surrogate Recovery Control Limits (%)

Sur1 =	Octacosane	26-152
Sur2 =	Tricontane	40-140

Results flagged with an asterisk (\*) indicate values outside control criteria. Results flagged with a pound (#) indicate the control criteria is not applicable.

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Form 2A - Organic

Page 1 of

QA/QC Report

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Water

Service Request: D0602091

Date Extracted: 12/20/2006

**Date Analyzed:** 12/23/2006

Matrix Spike/Duplicate Matrix Spike Summary TPH-Diesel / Motor Oil Range Organics by SW8015B

Sample Name:

ASE-51A-6D2

Lab Code:

D0602091-006

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Level: Low

Extraction Lot: DWG0601084

**Analysis Method:** 

8015B

ASE-51A-6D2MS

ASE-51A-6D2DMS

DWG0601084-2

DWG0601084-1

	Sample	Matrix Spike			Duplicate Matrix Spike			%Rec		RPD
Analyte Name	Result	Result	Expected	%Rec	Result	Expected	%Rec	Limits	RPD	Limit
C10 - C22 DRO (TPH-Diesel)	1100	3410	2380	97	3430	2380	98	61-143	1	30

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Page

RR13374

SuperSet Reference:

1 of 25

QA/QC Report

Client:

Honeywell International, Incorporated

Project:

Sky Harbor/2959482

Sample Matrix:

Water

Service Request: D0602091

Date Extracted: 12/20/2006

**Date Analyzed:** 12/23/2006

Lab Control Spike Summary

TPH-Diesel / Motor Oil Range Organics by SW8015B

**Extraction Method:** 

EPA 3510C

**Analysis Method:** 

8015B

Units: ug/L Basis: NA

Level: Low

Extraction Lot: DWG0601084

Lab Control Sample

DWG0601084-3

Lab Control Spike

%Rec Analyte Name Result Expected %Rec Limits C10 - C22 DRO (TPH-Diesel) 2000 2500 80 61-143 C22 - C32 HRO (TPH-Motor Oil) 2010 2500 81 60-120

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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### GC/MS VOLATILE ORGANICS

#### ORGANIC ANALYSES DATA PACKAGE

Analytical Method	: SW8260	AAB#:	D0602091	
Lab Name: Colur	mbia Analytical Services/Redding	· .		
Base/Command: <u>I</u>	HONEYWELL SKY HARBOR	<del></del>		
Project: Sky H	arbor			
	Field Sample ID	L	ab Sample ID	
	TB-121506		00602091-001	-
	ASE-66A-6D2		00602091-002	
	ASE-68A-6D2		00602091-003	
	PL-507-6D2		00602091-004	
	ASE-20A-6D2		00602091-005	
	ASE-51A-6D2		00602091-006	
	ASE-51A-6D2DL		00602091-006DL	<del></del>
	ASE-51A-6D2MS		00602091-006MS	-
	ASE-51A-6D2MSD		00602091-006MSD	
	ASE-53A-6D2		00602091-007	
	ASE-52A-6D2		00602091-008	
	ASE-52A-6D2DL		00602091-008DL	
	ASE-65A-6D2	<u> </u>	00602091-009	
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Comments:				
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			4.	
Loortify this data no	ackage is in compliance with the term	e and conditions	of the contract, both technic	ally and for
	other than the conditions detailed abo			
	r-readable data submitted on diskette			
	e, as verified by the following signature		zed by the Laboratory Wana	ger of the
Manager's designee	e, as verified by the following signatu	16.		
G:	222	Q		
Signature:	3 / / / / / /	Name: 15/14	AN Moore INIVAL MANAGET	-
Date:	12/10/01	Title: Tol.	miliae Mannager	
	(2/2/100	11110. 1000	hard - Celthard	Million v. v. 1 c/v.d/d

RDD-061229 : BG: BS-1328PST-SR: D0602091-D0602091-V

Analytical Method: SW8260	AAB #:_ D0602091	
Lab Name: Columbia Analytical Serv	ices/Redding	
Field Sample ID: TB-121506	Lab Sample ID: D0602091-001 Matrix: Water	
% Solids:	Initial Calibration ID: 12/21/06MSM	
Date Received: 12/16/06	Date Extracted: Date Analyzed: 12/21/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	. ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		-
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	ND	1		
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		,
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	ND	1		
1,1-Dichloroethane	0.12	2.0	ND	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	ND	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1	·	
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	ND	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	ND	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1	-	

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB #:_ D0602091	
Lab Name: Columbia Analytical Serv	ces/Redding	
Field Sample ID: TB-121506	Lab Sample ID: D0602091-001 Matrix: Water	
% Solids:	Initial Calibration ID: 12/21/06MSM	-
Date Received: 12/16/06	Date Extracted: Date Analyzed: 12/21/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	ND	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	ND	1		
Xylene (total)	0.14	10	ND	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	ND	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	ND	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	ND	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	ND	. 1		
sec-Butylbenzene	0.17	5.0	ND	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	ND	1		
1,4-Dichlorobenzene	0.11	1.0	ND	11		
n-Butylbenzene	0.33	5.0	ND	1		L2
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		L2
Naphthalene	0.29	2.0	ND	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

	1	Surrogate Recoveries are reported in Appendix O-A
Comments:		Internal Standards are reported in Appendix O-C

Lab Name   Columbia Analytical Services/Redding	Analytical M	Iethod: SW8260						AAB #: D	0602091	
	Lab Name:	Columbia Analyti	ical Services/R	Redding						
Date Received: 12/16/06 Date Extracted: Date Analyzed: 12/21/06  Concentration Units (ug/L or ug/Kg dry weight): UG/L Sample Volume: 5.000 ML  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier  Fluorobenzene Chiorobenzene-d4  Surrogate Recoveries are reported in Appendix O.4.	Field Sample	EID: <u>TB-121506</u>		Lab	Sample ID: I	0060209	91-001	Matrix: V	Vater	
Analyte MDL RL Concentration Units (ug/L or ug/Kg dry weight): UG/L Sample Volume: 5.000 ML  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier	% Solids:						Initial Calib	ration ID: _	12/21/06M	SM
Analyte MDL RL Concentration Units (ug/L or ug/Kg dry weight): UG/L Sample Volume: 5.000 ML  Analyte MDL RL Concentration Dilution Confirm Qualifier  Analyte MDL RL Concentration Dilution Confirm Qualifier	Date Receive	ed: 12/16/06	Date	Extracted:			Date Anal	yzed: 12/2	1/06	
Surrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 101 82-124 Dibromofluoromethane - SS 101 84-127 Toluene-d8 - SS 102 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
Surrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 101 82-124  Dibromofluoromethane - SS 101 84-127  Toluene-d8 - SS 102 80-117  Internal Standard Qualifier  Fluorobenzene Chlorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A		Analyte		MDL	RL	Con	centration	Dilution	Confirm	Qualifier
Surrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 101 82-124  Dibromofluoromethane - SS 101 84-127  Toluene-d8 - SS 102 80-117  Internal Standard Qualifier  Fluorobenzene Chlorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A							·			
Surrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 101 82-124  Dibromofluoromethane - SS 101 84-127  Toluene-d8 - SS 102 80-117  Internal Standard Qualifier  Fluorobenzene Chlorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
Surrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 101 82-124  Dibromofluoromethane - SS 101 84-127  Toluene-d8 - SS 102 80-117  Internal Standard Qualifier  Fluorobenzene Chlorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A		The state of the s								
Surrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 101 82-124  Dibromofluoromethane - SS 101 84-127  Toluene-d8 - SS 102 80-117  Internal Standard Qualifier  Fluorobenzene Chlorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
Surrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 101 82-124  Dibromofluoromethane - SS 101 84-127  Toluene-d8 - SS 102 80-117  Internal Standard Qualifier  Fluorobenzene Chlorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
Surrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 101 82-124  Dibromofluoromethane - SS 101 84-127  Toluene-d8 - SS 102 80-117  Internal Standard Qualifier  Fluorobenzene Chlorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A							· .			
Surrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 101 82-124  Dibromofluoromethane - SS 101 84-127  Toluene-d8 - SS 102 80-117  Internal Standard Qualifier  Fluorobenzene Chlorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
Surrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 101 82-124  Dibromofluoromethane - SS 101 84-127  Toluene-d8 - SS 102 80-117  Internal Standard Qualifier  Fluorobenzene Chlorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A		<u>.                                    </u>						4.27.11.7.7.7.7		
Surrogate Recovery Control Limits Qualifier  4-Bromofluorobenzene - SS 101 82-124  Dibromofluoromethane - SS 101 84-127  Toluene-d8 - SS 102 80-117  Internal Standard Qualifier  Fluorobenzene Chlorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
4-Bromofluorobenzene - SS 101 82-124 Dibromofluoromethane - SS 101 84-127 Toluene-d8 - SS 102 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A		A A A A A A A A A A A A A A A A A A A								
4-Bromofluorobenzene - SS 101 82-124 Dibromofluoromethane - SS 101 84-127 Toluene-d8 - SS 102 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A		-								
4-Bromofluorobenzene - SS 101 82-124 Dibromofluoromethane - SS 101 84-127 Toluene-d8 - SS 102 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A		***************************************					· · · · · · · · · · · · · · · · · · ·			
4-Bromofluorobenzene - SS 101 82-124 Dibromofluoromethane - SS 101 84-127 Toluene-d8 - SS 102 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
Dibromofluoromethane - SS 101 84-127 Toluene-d8 - SS 102 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A		Sui	rogate		Recovery	Co	ntrol Limit	s Qua	lifier	
Toluene-d8 - SS 102 80-117  Internal Standard Qualifier Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
Internal Standard Qualifier  Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A										
Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A		Toruche do Sc	,	:			00 117			
Fluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A				Internal Sta	ndard	1	Qualifier			
1,4-Dichlorobenzene-d4  Surrogate Recoveries are reported in Appendix O-A					iluai u		Quantitor			
Surrogate Recoveries are reported in Appendix O-A							······································			
			1,4-Dichloro	obenzene-d4						
						S	urrogate Recov	orios aro ronos	rtad in Annena	lir O-A
	Comments:					50				
										<del></del>

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Reddin	ng
Field Sample ID: ASE-66A-6D2	Lab Sample ID: D0602091-002 Matrix: Water
% Solids:	Initial Calibration ID: 12/21/06MSM
Date Received: 12/16/06 Date Extra	acted: Date Analyzed: _12/21/06
Concentration Units (ug/L or ug/Kg dry weight):	UG/L Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	2.2	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.27	1		E4
Acetone	1.0	20	1.2	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	3.9	1		
1,1-Dichloroethane	0.12	2.0	10	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.34	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	· 7 1		
Chloroform	0.14	2.0	0.29	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	1.3	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	2.3	1		
1,2-Dichloropropane	0.17	2.0	ND	11		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:		Surrogate Recoveries are reported Internal Standards are reported	,,
			-

Analytical Method: SW8260		A	AAB #: D0602091
Lab Name: Columbia Analytical Serv	ices/Redding		
Field Sample ID: ASE-66A-6D2	Lab Sample ID:	D0602091-002	Matrix: Water
% Solids:		Initial Calibra	ntion ID: <u>12/21/06MSM</u>
Date Received: 12/16/06	Date Extracted:	Date Analy	zed: 12/21/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.39	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1	·	
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	2.8	1		
Xylene (total)	0.14	10	0.81	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	1.2	1		E4
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	1.7	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	0.28	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	1.3	1		E4
sec-Butylbenzene	0.17	5.0	1.0	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.21	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	- 1		
n-Butylbenzene	0.33	5,0	ND	1		L2
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		L2
Naphthalene	0.29	2.0	4.0	1		
1,2,3-TrichIorobenzene	0.37	5.0	ND	1		

Comments:		Surrogate Recoveries are re Internal Standards are re	
	 	The state of the s	

Analytical M	lethod: SW8260		_					AAB#:_D	0602091	
Lab Name:	Columbia Analyt	ical Services	Redding	5						
Field Sample	e ID: <u>ASE-66A-6</u>	5D2		Lab Sa	ample ID:	D0602	2091-002	Matrix: V	Vater	
% Solids:					-		Initial Calib			SM
Date Receive	ed: 12/16/06	Da	te Extrac	eted:			Date Anal	yzed: 12/2	1/06	
	n Units (ug/L or ug									
	Analyte		MI	DL	RL	C	Concentration	Dilution	Confirm	Qualifier
		400-10-4-0-40-0-0-40-0-40-0-40-0-40-0-4				_				
					-					
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	A TOTAL AND THE STREET OF THE									
		AMAZ WY W								
				***************************************				3.444.444.44		
	wowever.					_			,	-
	Sur	rogate		ŀ	Recovery		Control Limits	Ona	lifier	
	4-Bromofluorob				101		82-124	, , , , ,		
	Dibromofluoron				103		84-127	~~~		
	Toluene-d8 - SS				102		80-117			
			Interna	al Stan	dard		Qualifier	_		
		Fluorobenz Chlorobenz						-		
		1,4-Dichlor		ne-d4			· · · · · · · · · · · · · · · · · · ·			
	'									
							Surrogate Recove			
Comments:							Internal Stando	ıras are repor	ieu in Append	.x 0-C
Annual Control								- M-144-14-14-14-14-14-14-14-14-14-14-14-14		

Analytical Method: SW8260		AAB #:	
Lab Name: Columbia Analytical Serv	vices/Redding		
Field Sample ID: ASE-68A-6D2	Lab Sample ID:	D0602091-003 Matrix: Water	
% Solids:		Initial Calibration ID: 12/21/06MSM	_
Date Received: 12/16/06	Date Extracted:	Date Analyzed: 12/21/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: 5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	0.81	1		E4
Vinyl chloride	0.22	1.0	25	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.88	1		E4
Acetone	1.0	20	2.4	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		-
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	150	1		
1,1-Dichloroethane	0.12	2.0	31	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	14	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1.		
1,1,1-Trichloroethane	0.14	2.0	ND	1 .		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	14	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	8.2	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.31	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	 Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB #: <u>D0602091</u>
Lab Name: Columbia Analytical Service	ces/Redding
Field Sample ID: ASE-68A-6D2	Lab Sample ID: D0602091-003 Matrix: Water
% Solids:	Initial Calibration ID: 12/21/06MSM
Date Received: 12/16/06	Date Extracted: Date Analyzed: 12/21/06
Concentration Units (ug/L or ug/Kg dry v	weight): UG/L Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.40	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	10	1		
Xylene (total)	0.14	10	3.4	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	7.5	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	· 1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	12	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	1.4	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	1.3	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	18	1		
sec-Butylbenzene	0.17	5.0	6.8	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	3.3	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	7.0	1		L2
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		L2
Naphthalene	0.29	2.0	21	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C

Analytical M	lethod: SW8260	-				AAB #:_ D	0602091	
Lab Name:	Columbia Analyt	ical Services/Rec	lding					
Field Sample	ID: ASE-68A-6	5D2	Lab S	Sample ID: L	00602091-003	Matrix: V	Vater	
% Solids:					Initial Calib			
		Date E	xtracted:		Date Ana	- lyzed: 12/2	1/06	
					Sample Volume:			
						<del></del>		
	Analyte		MDL	RL	Concentration	Dilution	Confirm	Qualifier
	*							
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			turb turb the					
	***************************************							
			·					************************
	Sui	rogate		Recovery	Control Limit	s Qua	llifier	
	4-Bromofluorob			102	82-124			
	Dibromofluoror Toluene-d8 - SS			101	84-127 80-117			
	Toluene-da - SS			100	80-117			
	L					<u> </u>		
			ternal Sta	ndard	Qualifier			
		Fluorobenzene Chlorobenzene				_		
		1,4-Dichlorobe				-		
					Surrogate Recov	veries are repoi	rted in Appena	lix O-A
Comments:						dards are repor		

Analytical Method: SW8260	AAB #: <u>D0602091</u>
Lab Name: _Columbia Analytical Serv	ces/Redding
Field Sample ID: PL-507-6D2	Lab Sample ID: D0602091-004 Matrix: Water
% Solids:	Initial Calibration ID: 12/21/06MSM
Date Received: 12/16/06	Date Extracted: Date Analyzed: 12/21/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5 000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	27	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	I		
1,1-Dichloroethene	0.19	2.0	0.86	I	,	E4
Acetone	1.0	20	1.7	Ι		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	150	1		
1,1-Dichloroethane	0.12	2.0	31	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	. 1		
cis-1,2-Dichloroethene	0.17	2.0	15	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	14	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	8.2	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	I		
Toluene	0.14	2.0	0.28	-1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	meth-loss de de Paris de San		AAB #: <u>D0602091</u>
Lab Name: Columbia Analytical Serv	vices/Redding		
Field Sample ID: PL-507-6D2	Lab Sample ID:	D0602091-004	Matrix: Water
% Solids:		Initial Calib	oration ID: <u>12/21/06MSM</u>
Date Received: 12/16/06	Date Extracted:	Date Ana	lyzed: _12/21/06
Concentration Units (ug/L or ug/Kg dry	v weight): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.38	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	10	1		
Xylene (total)	0.14	10	3.4	1		E4
Styrene	0.16	2.0	ND	11		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	7.6	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	12	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	1.4	11		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	1.3	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	18	1		
sec-Butylbenzene	0.17	5.0	7.0	1		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	3.4	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	7.3	1		L2
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		L2
Naphthalene	0.29	2.0	22	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	lethod: SW8260							AAB #:D	0602091	
	Columbia Analyt	ical Services/I	- Redding					-		
	PL-507-6D				nnle ID· D	0602091-0	004	Matrix: V	Vater	
				Lao San	прис п <u>р. г</u>					
% Solids:									12/21/06M	5101
	ed: 12/16/06									
Concentratio	n Units (ug/L or ug	g/Kg dry weig	ght): <u> </u>	JG/L	-	Sample V	olume:	_5.000 M	<u>L</u>	
	Analyte		MI	)L	RL	Concer	itration	Dilution	Confirm	Qualifie
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	1.0-10-10-10-10-10-10-10-10-10-10-10-10-10									
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	S <sub>111</sub>	rrogate		Do	covery	Contr	ol Limits	One	lifier	
	4-Bromofluorob				103		2-124	Qua		
	Dibromofluoron				99		<b>I-</b> 127			
	Toluene-d8 - SS	3			100	80	)-117			
			Interna	l Stand:	ard	Q	ualifier	1		
	:	Fluorobenze	ene					]		
	-	Chlorobenz					-	_		
		1,4-Dichlor	obenzen	e-d4			.,	_		
Commonto									ted in Append ted in Append	
Comments:						17/110	Standt			
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Analytical Method: SW8260	AAB #: <u>D0602091</u>
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-20A-6D2 Lab Sample ID:	D0602091-005 Matrix: Water
% Solids:	Initial Calibration ID: 12/21/06MSM
Date Received: 12/16/06 Date Extracted:	Date Analyzed: 12/21/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	16	1		
Bromomethane	0.27	1.0	ND	. 1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	ND	1		
Acetone	1.0	20	2.0	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	6.8	1		
1,1-Dichloroethane	0.12	2.0	20	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	0.79	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	ND	1		
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1 -		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	7.0	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	1.6	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.80	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	, and an analysis of the state		AAB #: D0602091	
Lab Name: Columbia Analytical Serv	vices/Redding			
Field Sample ID: ASE-20A-6D2	Lab Sample ID:	D0602091-005	Matrix: Water	
% Solids:		Initial Calib	ration ID: 12/21/06MSM	_
Date Received: 12/16/06	Date Extracted:	Date Analy	yzed: 12/21/06	
Concentration Units (ug/L, or ug/Kg dry	v weight): UG/L	Sample Volume:	5.000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.26	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	24	11		
Xylene (total)	0.14	10	4.6	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	11	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	10	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	3.2	11		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.67	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	16	. 1 .		
sec-Butylbenzene	0.17	5.0	5.9	11		
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	1.5	. 1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		L2
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		L2
Naphthalene	0.29	2.0	21	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Analytical Me	thod: SW8260	· · · · · · · · · · · · · · · · · · ·						AAB #:D	0602091	·····
Lab Name:	Columbia Analyti	cal Services/R	edding							
Field Sample I	D: ASE-20A-6	D2		Lab Sa	mple ID: D	0602	091-005	Matrix: _V	Vater	
% Solids:						-	Initial Calib	ration ID:	12/21/06M	SM
Date Received	: 12/16/06	Date	Extrac	ted:	-		Date Anal	yzed: <u>12/2</u>	1/06	
	Units (ug/L or ug									
	Analyte		MI	)L	RL	C	oncentration	Dilution	Confirm	Qualifie
	and the second s									
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-	4-Bromofluorob	rogate		ŀ	Recovery 101	+ 4	Control Limits 82-124	s Qua	lifier	
	Dibromofluoron				97		84-127			
	Toluene-d8 - SS				99		80-117			
			Interna	l Stan	dard		Qualifier			
		Fluorobenze				····				
		Chlorobenze 1,4-Dichloro		d/1			, , , , , , , , , , , , , , , , , , , ,			
		1,4-101011010	JOCH ZCH	ic-u-						
							Surrogate Recov	eries are repoi	ted in Append	lix O-A
Comments:							Internal Stand			
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Analytical Method: SW8260	PARTICIPATION OF THE PARTICIPA		AAB #: <u>D0602091</u>
Lab Name: Columbia Analytical Serv	vices/Redding		
Field Sample ID: ASE-51A-6D2	Lab Sample ID:	D0602091-006	Matrix: Water
% Solids:		Initial Calib	ration ID: 12/21/06MSM
Date Received: 12/16/06	Date Extracted:	Date Anal	yzed: 12/22/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	0.89	1		E4
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	3.7	1		E4
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	1.0	1		E4
Acetone	1.0	20	2.9	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	0.33	1		E4
Iodomethane	0.20	10	0.22	1		E4
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	66	1		
1,1-Dichloroethane	0.12	2.0	16	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	1.8	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND ND	1		
Chloroform	0.14	2.0	0.29	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	100	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	4.9	1 -		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	0.43	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	name and	AAB #: <u>D0602091</u>
Lab Name: Columbia Analytical Serv	ices/Redding	
Field Sample ID: ASE-51A-6D2	Lab Sample ID: D0602091-006	Matrix: Water
% Solids:	Initial Calibr	ration ID: 12/21/06MSM
Date Received: 12/16/06	Date Extracted: Date Analy	yzed: 12/22/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	0.42	1		E4
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	. 1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1	·	
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	93	1		
Xylene (total)	0.14	10	84	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	29	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	35	1		
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	16	1		
4-Chlorotoluene	0.16	5.0	ND	11		
tert-Butylbenzene	0.18	5.0	1.2	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	69	1		
sec-Butylbenzene	0.17	5.0	12	1	·	
1,3-Dichlorobenzene	. 0.11	1.0	ND	11		
p-Isopropyltoluene	0.10	2.0	5.9	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		L2
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		***************************************
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		L2
Naphthalene	0.29	2.0	120	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	lethod: SW8260							AAB#: D	0602091	
	Columbia Analyt	ical Services/	- Redding						- Lander Control	
	ID: ASE-51A-6				ample ID: I	00602	091-006	Matrix: V	Vater	
% Solids:							T 1.1 1.0 111			
	ed: 12/16/06	Dat	te Extrac	rted:				_		S. W. L. Billion
	n Units (ug/L or ug									
Concentration		g/Rg dry wer	gni)	·		- Jan	ipic volume.		<u> </u>	
	Analyte		MI	DL	RL	C	oncentration	Dilution	Confirm	Qualifier
	TO STREET THE STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET									
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							Anna de Balancia de Provincia			
	TO THE STREET OF						- 4 - 9141-21444-1974-1974-1974-1974-1974-1974-1974-			
	Sur	rogate		F	Recovery		Control Limits	s Qua	lifier	
	4-Bromofluorob				101	82-124		-		
	Dibromofluoron Toluene-d8 - SS				99 99		84-127 80-117			
	Toluene-us - 55				99		.00-117			
								<u> </u>		
		Fluorobenz	Interna	ıl Stan	dard		Qualifier	-		
		Chlorobenz						1		
		1,4-Dichlor	obenzer	ne-d4						
							Surrogate Recove Internal Stand			
Comments:	201.50						mernai siana	aras are repor	ей іп Аррепа	
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Analytical Method: SW8260			AAB #: D0602091	
Lab Name: Columbia Analytical Services/Red	ding			
Field Sample ID: ASE-51A-6D2DL	Lab Sample ID:	D0602091-006DL	Matrix: Water	
% Solids:		Initial Calib	ration ID: 12/21/06MSM	
Date Received: 12/16/06 Date E	xtracted:	Date Anal	yzed: 12/22/06	
Concentration Units (ug/L or ug/Kg dry weight)	· UG/L	Sample Volume	5 000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	3.6	50	ND	10		D2
Chloromethane	2.3	50	ND	10		D2
Vinyl chloride	2.2	10	ND	10		D2
Bromomethane	2.7	10	ND	10		D2
Chloroethane	2.0	50	ND	10		D2
Trichlorofluoromethane	1.4	50	ND	10		D2
1,1-Dichloroethene	1.9	20	ND	10		D2
Acetone	10	200	ND	10		D2
Carbon disulfide	1.1	50	ND	10		D2
Methylene chloride	1.5	50	ND	10		D2
lodomethane	2.0	100	ND	10		D2
trans-1,2-Dichloroethene	1.6	20	ND	10		D2
Tert-butylmethylether	1.7	10	63	10		D2
1,1-Dichloroethane	1.2	20	15	10		D2E4
Vinyl acetate	8.4	250	ND	10		D2
2,2-Dichloropropane	3.3	20	ND	10		D2
cis-1,2-Dichloroethene	1.7	20	1.9	10		D2E4
2-Butanone	9.0	100	ND	10		D2
Bromochloromethane	2.5	50	ND	10		D2
Chloroform	1.4	20	ND	10		D2
1,1,1-Trichloroethane	1.4	20	ND	10		D2
1,1-Dichloropropene	1.8	20	ND	10		D2
Carbon tetrachloride	1.8	20	ND	10		D2
Benzene	1.2	10	110	10		D2
1,2-Dichloroethane	1.8	10	ND	10		D2
Trichloroethene	1.0	10	5.1	10		D2E4
1,2-Dichloropropane	1.7	20	ND	10		D2
Dibromomethane	1.8	. 20	ND	10		D2
Bromodichloromethane	1.7	10	ND	10		D2
cis-1,3-Dichloropropene	1.3	20	ND	10		D2
4-methyl-2-pentanone	8.5	100	ND	10		D2
Toluene	1.4	20	ND	10		D2
trans-1,3-Dichloropropene	1.9	20	ND	10		D2

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	Saltinia Billia Maringo	AAB #: <u>D0602091</u>
Lab Name: Columbia Analytical Serv	ices/Redding	
Field Sample ID: ASE-51A-6D2DL	Lab Sample ID:	D0602091-006DL Matrix: Water
% Solids:		Initial Calibration ID: 12/21/06MSM
Date Received: 12/16/06	Date Extracted:	Date Analyzed: 12/22/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	2.2	10	ND	10		D2
Tetrachloroethene	2.2	10	ND	10		D2
1,3-Dichloropropane	1.1	20	ND	10		D2
2-Hexanone	5.8	100	ND	10		D2
Dibromochloromethane	1.5	20	ND	10		D2
1,2-Dibromoethane	1.5	20	ND	10		D2
Chlorobenzene	1.5	10	ND	10		D2
1,1,1,2-Tetrachloroethane	2.3	50	ND	10		D2
Ethylbenzene	1.5	20	130	10		D2
Xylene (total)	1.4	100	84	10		D2E4
Styrene	1.6	20	ND	10		D2
Bromoform	1.8	50	ND	10		D2
Isopropylbenzene	1.7	20	28	10		D2
1,1,2,2-Tetrachloroethane	1.7	10	ND	10		D2
Bromobenzene	1.7	50	ND	10		D2
1,2,3-Trichloropropane	2.0	100	ND	10		D2
n-Propylbenzene	1.3	20	32	10		D2
2-Chlorotoluene	1.6	50	ND	10		D2
1,3,5-Trimethylbenzene	1.5	20	15	10		D2E4
4-Chlorotoluene	1.6	50	ND	10		D2
tert-Butylbenzene	1.8	50	10	10		D2E4
1,2,4-Trimethylbenzene	1.3	20	73	10		D2
sec-Butylbenzene	1.7	50	11	10		D2E4
1,3-Dichlorobenzene	1.1	10	ND	10		. D2
p-Isopropyltoluene	1.0	20	5.4	10		D2E4
1,4-Dichlorobenzene	1.1	10	ND	10		D2
n-Butylbenzene	3.3	50	ND	10		D2
1,2-Dichlorobenzene	1.4	10	ND	10		D2
1,2-Dibromo-3-chloropropane	8.1	50	ND	10		D2
1,2,4-Trichlorobenzene	3.6	50	ND	10	,	D2
Hexachlorobutadiene	6.0	10	ND	10		D2
Naphthalene	2.9	20	170	10		D2
1,2,3-Trichlorobenzene	3.7	50	ND	10		D2

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	Method: SW8260					AAB#: D	0602091	
Lab Name:	Columbia Analyt	ical Services/Re	dding		1,0			
Field Sample	e ID: <u>ASE-51A-</u>	6D2DL	Lab	Sample ID:	D0602091-006DL	_ Matrix: _V	Vater	
% Solids: _					Initial Cali	bration ID:	12/21/06M	SM
Date Receive	ed: 12/16/06	Date E	Extracted:		Date Ana	ılyzed: 12/2	2/06	
					Sample Volume:			and decorate and an analysis
	Analyte		MDL	RL	Concentration	Dilution	Confirm	Qualific
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		rrogate		Recovery	Control Limi	ts Qua	lifier	
	4-Bromofluorob			100	82-124	-		
	Dibromofluoror Toluene-d8 - SS			99	84-127 80-117			
		In	ternal Sta	ndard	Qualifier			
Fluorobenzene								
		Chlorobenzene						
		1,4-Dichlorob	enzene-d4					
Comments:					Surrogate Reco Internal Stand	veries are repor dards are repor		
				Salton And				
	Manage W	-				mmmare		

Analytical Method: SW8260	AAB #:_ D0602091
Lab Name: Columbia Analytical Serv	rices/Redding
Field Sample ID: ASE-53A-6D2	Lab Sample ID: D0602091-007 Matrix: Water
% Solids:	Initial Calibration ID: 12/21/06MSM
Date Received: 12/16/06	Date Extracted: Date Analyzed: 12/21/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L Sample Volume: 5.000 ML

Analyte	MDL	RL ·	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	1.4	1		E4
Acetone	1.0	20	1.8	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	1.9	1		
1,1-Dichloroethane	0.12	2.0	0.78	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	1.1	1		E4
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1 .		
Chloroform	0.14	2.0	1.1	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	1.4	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	6.8	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical Method: SW8260	AAB #:_ D0602091
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-53A-6D2 La	b Sample ID: D0602091-007 Matrix: Water
% Solids:	Initial Calibration ID: 12/21/06MSM
Date Received: 12/16/06 Date Extracted	d: Date Analyzed: 12/2I/06
Concentration Units (ug/L or ug/Kg dry weight): UC	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	1.8	1		
1,3-Dichloropropane	0.11	2.0	ND	- 1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	6.7	1		
Xylene (total)	0.14	10	3.7	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	2.6	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		,
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	3.9	1		
2-Chlorotoluene	0.16	5.0	ND	. 1		
1,3,5-Trimethylbenzene	0.15	2.0	1.2	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.19	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	6.0	1		
sec-Butylbenzene	0.17	5.0	1.5	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.61	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	1 .		
n-Butylbenzene	0.33	5.0	ND	1		L2
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		L2
Naphthalene	0.29	2.0	15	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-A
Comments:	Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260		_					AAB #:D	0602091	
Lab Name:	Columbia Analyt	ical Services/	Redding	<u>.                                    </u>						
Field Sample	ID: ASE-53A-6	6D2		Lab Sa	ample ID:	D0602	2091-007	Matrix: V	Vater	
% Solids:							Initial Calib			
	d: 12/16/06	Dat	e Extrac	ted:				,		
	n Units (ug/L or ug									Acceptance of the Control of the Con
		5,1-8,4-7,8	T						T	
	Analyte		MI	DL	RL	C	Concentration	Dilution	Confirm	Qualifier
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THE SHARE VEGETOR										
	Sur	rogate			Recovery		Control Limits	Спа	lifier	
	4-Bromofluorob			1	101	-	82-124	, Qua		
	Dibromofluoron				100		84-127			
	Toluene-d8 - SS	)			100	_	80-117			
			Interna	l Stan	dard		Qualifier			
		Fluorobenz						-		
Chlorobenzene-d5 1,4-Dichlorobenzene-d						-				
								·		
							Surrogate Recove	ries are repor	ted in Append	ix O-A
Comments:							Internal Stando	ards are repor	ted in Append	ix O-C
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Analytical Method: SW8260				AAB #: <u>D0602091</u>
Lab Name: Columbia Analytical Serv	ices/Reddi	ing		
Field Sample ID: ASE-52A-6D2		Lab Sample ID:	D0602091-008	_ Matrix: _Water
% Solids:			Initial Cali	ibration ID: 12/21/06MSM
Date Received: 12/16/06	Date Ext	racted:	Date An	alyzed: 12/22/06
Concentration Units (ug/L or ug/Kg dry	weight):	UG/L	Sample Volume:	5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	0.80	1	·	E4
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	2.6	1		
Acetone	1.0	20	2.2	1		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	50	1		
1,1-Dichloroethane	0.12	2.0	15	1		
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-DichIoroethene	0.17	2.0	2.2	1	-	
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1 .		
Chloroform	0.14	2.0	0.78	1		E4
1,1,1-Trichloroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1 .		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	210	1		
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	17	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		1000000
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1.		
Toluene	0.14	2.0	1.8	1		E4
trans-1,3-Dichloropropene	0.19	2.0	ND	1		

	Surrogate Recoveries are reported in Appendix O-				
Comments:	Internal Standards are reported in Appendix O-C				

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	
Field Sample ID: ASE-52A-6D2 Lab Sample ID:	D0602091-008 Matrix: Water
% Solids:	Initial Calibration ID: 12/21/06MSM
Date Received: 12/16/06 Date Extracted:	Date Analyzed: 12/22/06
Concentration Units (ug/L or ug/Kg dry weight): UG/L	Sample Volume: 5.000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1		
Tetrachloroethene	0.22	1.0	1.2	1		
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	.1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	45	1		
Xylene (total)	0.14	10	97	1		
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	9.4	1		
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1	,	
1,2,3-Trichloropropane	0.20	10	ND	1		
n-Propylbenzene	0.13	2.0	11	1		
2-Chlorotoluene	0.16	5.0	. ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	12	1		
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	0.42	1		E4
1,2,4-Trimethylbenzene	0.13	2.0	64	1		
sec-Butylbenzene	0.17	5.0	4.4	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	4.0	1		
1,4-Dichlorobenzene	0.11	1.0	ND	1		
n-Butylbenzene	0.33	5.0	ND	1		L2
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1	-	L2
Naphthalene	0.29	2.0	62	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:		Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Analytical Meth	hod: SW8260	· · · · · · · · · · · · · · · · · · ·					AAB #:D	0602091	
Lab Name: _C	Columbia Analyti	cal Services/Red	dding						
Field Sample II	D: <u>ASE-52A-6</u>	5D2	Lab	Sample ID:	D06020	91-008	Matrix: V	Vater	
% Solids:	s:					Initial Calibration ID: 12/21/06MSM			
Date Received:	12/16/06	Date E	extracted:			Date Anal	yzed: 12/2	2/06	
	Units (ug/L or ug								
	Analyte		MDL	RL	Cor	ncentration	Dilution	Confirm	Qualific
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	Sur	rogate		Recovery	Control Lin		s Oua	lifier	
	4-Bromofluorob			103					
	Dibromofluoron			99		84-127			
<u> </u>	Toluene-d8 - SS	<del> </del>		99		80-117			
<u> </u>									
		In	ternal Sta	ndard		Qualifier			
Fluorobenzene				ne-d4			_ .		
	1,4-Dichlorobenzene								
		1,. 2101101000			<u></u>				
					S	urrogate Recov	eries are renor	ted in Annena	lir O-A
Comments:					S	Internal Stand			
	4-Bromofluorob	In Fluorobenzene Chlorobenzene	e-d5	99 99 ndard		82-124 84-127 80-117 Qualifier	eries are repor		

Analytical Method: SW8260		AAB#	D0602091	
Lab Name: Columbia Analytical Serv	ices/Redding			e.
Field Sample ID: ASE-52A-6D2DL	Lab Sample ID:	D0602091-008DL Matrix	Water	
% Solids:		Initial Calibration II	D: <u>12/21/06MSM</u>	_
Date Received: 12/16/06	Date Extracted:	Date Analyzed:	2/22/06	
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: 5.000	) ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	3.6	50	ND	10		D2
Chloromethane	2.3	50	ND	10		D2
Vinyl chloride	2.2	10	ND	10		D2
Bromomethane	2.7	10	ND	10		D2
Chloroethane	2.0	50	ND	10		D2
Trichlorofluoromethane	1.4	50	ND	10		D2
1,1-Dichloroethene	1.9	20	2.4	10		D2E4
Acetone	10	200	ND	10		D2
Carbon disulfide	1.1	50	ND	10		D2
Methylene chloride	1.5	50	ND	10	'	D2
Iodomethane	2.0	100	ND	10		D2
trans-1,2-Dichloroethene	1.6	20	ND	10		D2
Tert-butylmethylether	1.7	10	48	10		D2
1,1-Dichloroethane	1.2	20	14	10		D2E4
Vinyl acetate	8.4	250	ND	10		D2
2,2-Dichloropropane	3.3	20	ND	10		D2
cis-1,2-Dichloroethene	1.7	20	2.2	10		D2E4
2-Butanone	9.0	100	ND	10		D2
Bromochloromethane	2.5	50	ND	10		D2
Chloroform	1.4	20	ND	10		D2
1,1,1-Trichloroethane	1.4	20	ND	10		D2
1,1-Dichloropropene	1.8	20	. ND	10		D2
Carbon tetrachloride	1.8	20	ND	10		D2
Benzene	1.2	10	380	10		D2
1,2-Dichloroethane	1.8	10	ND	10		D2
Trichloroethene	1.0	10	17	10		D2
1,2-Dichloropropane	1.7	20	ND	10		D2
Dibromomethane	1.8	20	ND	10		D2
Bromodichloromethane	1.7	10	ND	10		D2
cis-1,3-Dichloropropene	1.3	20	ND	10		D2
4-methyl-2-pentanone	8.5	100	ND	10		D2
Toluene	1.4	20	1.8	. 10		D2E4
trans-1,3-Dichloropropene	1.9	20	ND	10		D2

	Surrogate Recoveries are reported in Appendix O-
Comments:	Internal Standards are reported in Appendix O-0

Analytical Method: SW8260		AAB #: <u>D0602091</u>
Lab Name: Columbia Analytical Serv	ices/Redding	
Field Sample ID: ASE-52A-6D2DL	Lab Sample ID:	D0602091-008DL Matrix: Water
% Solids:		Initial Calibration ID: 12/21/06MSM
Date Received: 12/16/06	Date Extracted:	Date Analyzed: 12/22/06
Concentration Units (119/L or 119/Kg dry	weight) UG/L	Sample Volume: 5 000 ML

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	2.2	10	ND	10		D2
Tetrachloroethene	2.2	10	ND	10		D2
1,3-Dichloropropane	1.1	20	ND	. 10		D2
2-Hexanone	5.8	100	ND	10		D2
Dibromochloromethane	1.5	20	ND	10		D2
1,2-Dibromoethane	1.5	20	ND	10		D2
Chlorobenzene	1.5	10	ND	10		D2
1,1,1,2-Tetrachloroethane	2.3	50	ND	10		D2
Ethylbenzene	1.5	20	48	10		D2
Xylene (total)	1.4	100	100	10		D2
Styrene	1,6	20	ND	10		D2
Bromoform	1.8	50	ND	10		D2
Isopropylbenzene	1.7	20	8.9	10		D2E4
1,1,2,2-Tetrachloroethane	1.7	10	ND	10		D2
Bromobenzene	1.7	50	ND	10		D2
1,2,3-Trichloropropane	2.0	100	ND	10		D2
n-Propylbenzene	1.3	20	10	10		D2E4
2-Chlorotoluene	1.6	50	ND	10		D2
1,3,5-Trimethylbenzene	1.5	20	12	10		D2E4
4-Chlorotoluene	1.6	50	ND	10		D2
tert-Butylbenzene	1.8	50	ND	10		D2
1,2,4-Trimethylbenzene	1.3	20	67	10		D2
sec-Butylbenzene	1.7	50	4.6	10		D2E4
1,3-Dichlorobenzene	1.1	10	ND	10		D2
p-Isopropyltoluene	1.0	20	3.9	10		D2E4
1,4-Dichlorobenzene	1.1	10	ND	10		D2
n-Butylbenzene	3.3	50	ND	10		D2
I,2-Dichlorobenzene	1.4	10	ND	10		D2
1,2-Dibromo-3-chloropropane	8.1	50	ND	10		D2
1,2,4-Trichlorobenzene	3.6	50	ND	10		D2
Hexachlorobutadiene	6.0	10	ND	10		D2
Naphthalene	2.9	20	69	10		D2
1,2,3-Trichlorobenzene	3.7	50	ND	10		D2

Comments:		Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C
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Analytical M	Method: SW8260						AAB #: D	0602091	
Lab Name:	Columbia Analyt	ical Services/Rede	ding						
Field Sample	e ID: <u>ASE-52A-6</u>	SD2DL	Lab S	Sample ID:	00602	2091-008DL	Matrix: _V	Vater	
% Solids:				- ,,		Initial Calib	ration ID:	12/21/06M	SM
Date Receive	ed: 12/16/06	Date Ex	tracted:				-		
	on Units (ug/L or ug					mple Volume:			
-	Analyte		MDL	RL		Concentration	Dilution	Confirm	Qualifier
							Direction		Quanner
						- LONG WATER THE			
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	Sur	rogate		Recovery		Control Limits	Qua	lifier	
	4-Bromofluorob			101		82-124			
	Dibromofluoron			97	+	84-127			
	Toluene-d8 - SS			102		80-117			
		Inte	ernal Star	ndard		Qualifier			
		Fluorobenzene					_		
Chlorobenzene-							-		
		1,4-Dichlorober	izene-d4						
Comments:						Surrogate Recove Internal Stande			
Comments:					-				
						**************************************			

Analytical Method: SW8260		AAB #:	D0602091
Lab Name: Columbia Analytical Serv	ices/Redding		
Field Sample ID: ASE-65A-6D2	Lab Sample ID: DO	0602091-009 Matrix:	Water
% Solids:		Initial Calibration II	D: <u>12/21/06MSM</u>
Date Received: 12/16/06	Date Extracted:	Date Analyzed: _!	2/22/06
Concentration Units (ug/L or ug/Kg dry	weight): UG/L	Sample Volume: 5.000	ML_

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
Dichlorodifluoromethane	0.36	5.0	ND	1		
Chloromethane	0.23	5.0	ND	1		
Vinyl chloride	0.22	1.0	ND	1		
Bromomethane	0.27	1.0	ND	1		
Chloroethane	0.20	5.0	ND	1		
Trichlorofluoromethane	0.14	5.0	ND	1		
1,1-Dichloroethene	0.19	2.0	0.86	1		E4
Acetone	1.0	20	1.3	11		E4
Carbon disulfide	0.11	5.0	ND	1		
Methylene chloride	0.15	5.0	ND	1		
Iodomethane	0.20	10	ND	1		
trans-1,2-Dichloroethene	0.16	2.0	ND	1		
Tert-butylmethylether	0.17	1.0	0.22	1		E4
1,1-Dichloroethane	0.12	2.0	0.74	1		E4
Vinyl acetate	0.84	25	ND	1		
2,2-Dichloropropane	0.33	2.0	ND	1		
cis-1,2-Dichloroethene	0.17	2.0	3.0	1		
2-Butanone	0.90	10	ND	1		
Bromochloromethane	0.25	5.0	ND	1		
Chloroform	0.14	2.0	1.1	1		E4
1,1,1-TrichIoroethane	0.14	2.0	ND	1		
1,1-Dichloropropene	0.18	2.0	ND	1		
Carbon tetrachloride	0.18	2.0	ND	1		
Benzene	0.12	1.0	0.68	1		E4
1,2-Dichloroethane	0.18	1.0	ND	1		
Trichloroethene	0.10	1.0	8.4	1		
1,2-Dichloropropane	0.17	2.0	ND	1		
Dibromomethane	0.18	2.0	ND	1		
Bromodichloromethane	0.17	1.0	ND	1		
cis-1,3-Dichloropropene	0.13	2.0	ND	1		
4-methyl-2-pentanone	0.85	10	ND	1		
Toluene	0.14	2.0	ND	1		
trans-1,3-Dichloropropene	0.19	2.0	ND	. 1		

Comments:	Internal Standards are reported in Appendix O-C

Analytical Method: SW8260			AAB #: <u>D0602091</u>	
Lab Name: Columbia Analytical Ser	vices/Redding			
Field Sample ID: ASE-65A-6D2	Lab Sample ID:	D0602091-009	Matrix: Water	
% Solids:		Initial Ca	dibration ID: 12/21/06MSM	
Date Received: 12/16/06	Date Extracted:	Date A	nalyzed: 12/22/06	
Concentration Units (ug/L or ug/Kg dr	v weight): UG/L	Sample Volume	e: 5 000 ML	

Analyte	MDL	RL	Concentration	Dilution	Confirm	Qualifier
1,1,2-Trichloroethane	0.22	1.0	ND	1	-	
Tetrachloroethene	0.22	1.0	1.1	1	-	
1,3-Dichloropropane	0.11	2.0	ND	1		
2-Hexanone	0.58	10	ND	1		
Dibromochloromethane	0.15	2.0	ND	1		
1,2-Dibromoethane	0.15	2.0	ND	1		
Chlorobenzene	0.15	1.0	ND	1		
1,1,1,2-Tetrachloroethane	0.23	5.0	ND	1		
Ethylbenzene	0.15	2.0	2.5	I		
Xylene (total)	0.14	10	0.82	1		E4
Styrene	0.16	2.0	ND	1		
Bromoform	0.18	5.0	ND	1		
Isopropylbenzene	0.17	2.0	1.2	1		E4
1,1,2,2-Tetrachloroethane	0.17	1.0	ND	1		
Bromobenzene	0.17	5.0	ND	1		
1,2,3-Trichloropropane	0.20	10	ND	I		
n-Propylbenzene	0.13	2.0	1.8	1		E4
2-Chlorotoluene	0.16	5.0	ND	1		
1,3,5-Trimethylbenzene	0.15	2.0	0.29	1		E4
4-Chlorotoluene	0.16	5.0	ND	1		
tert-Butylbenzene	0.18	5.0	ND	1		
1,2,4-Trimethylbenzene	0.13	2.0	1.8	1		E4
sec-Butylbenzene	0.17	5.0	0.74	1		E4
1,3-Dichlorobenzene	0.11	1.0	ND	1		
p-Isopropyltoluene	0.10	2.0	0.21	1		E4
1,4-Dichlorobenzene	0.11	1.0	ND	1	,	
n-Butylbenzene	0.33	5.0	ND	1		L2
1,2-Dichlorobenzene	0.14	1.0	ND	1		
1,2-Dibromo-3-chloropropane	0.81	5.0	ND	1		
1,2,4-Trichlorobenzene	0.36	5.0	ND	1		
Hexachlorobutadiene	0.60	1.0	ND	1		L2
Naphthalene	0.29	2.0	7.4	1		
1,2,3-Trichlorobenzene	0.37	5.0	ND	1		

Comments:	Surrogate Recoveries are reported in Appendix O-A Internal Standards are reported in Appendix O-C

Analytical M	ethod: SW8260	·						AAB #: D	0602091	
Lab Name:	Columbia Analyti	ical Services/I	Redding	<u> </u>						
Field Sample	ID: <u>ASE-65A-6</u>	5D2		Lab Sa	ample ID: D	00602	2091-009	Matrix: V	Vater	
% Solids:							Initial Calib			SM
Date Receive	d: <u>12/16/06</u>	Date	e Extrac	ted:			Date Anal	yzed: 12/2	2/06	
	n Units (ug/L or ug									
	Analyte		MI	)L	RL	C	Concentration	Dilution	Confirm	Qualifier
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							H-10-11-11-11-11-11-11-11-11-11-11-11-11-			
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	Sur	rogate		I	Recovery		Control Limits	S Qua	lifier	
	4-Bromofluorob	<del></del>	····		102		82-124			
	Dibromofluoron Toluene-d8 - SS	·			98 102		84-127 80-117			
	Total do S				102		00 117			
			T .	104						
		Fluorobenze	Interna	ii Stan	dard	***************************************	Qualifier			
		Chlorobenz				Name			~	
		1,4-Dichlor	obenzen	ne-d4						
							Surrogate Recove			
Comments:							Internal Stando	ards are repor	ted in Append	ix O-C

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	·
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1221W01
Lab Sample ID: M1221W01	
Initial Calibration ID: 12/21/06MSM	

Analyte	MDL	Method Blank	RL	Q
Dichlorodifluoromethane	0.36	ND	5.0	
Chloromethane	0.23	ND	5.0	
Vinyl chloride	0.22	· ND	1.0	
Bromomethane	0.27	ND	1.0	
Chloroethane	0.20	ND	5.0	
Trichlorofluoromethane	0.14	ND	5.0	
1,1-Dichloroethene	0.19	ND	2.0	
Acetone	1.0	ND	20	
Carbon disulfide	0.11	ND	5.0	
Methylene chloride	0.15	ND	5.0	
lodomethane	0.20	ND	10	
trans-1,2-Dichloroethene	0.16	ND	2.0	
Tert-butylmethylether	0.17	ND	1.0	
1,1-Dichloroethane	0.12	ND	2.0	
Vinyl acetate	0.84	ND	25	
2,2-Dichloropropane	0.33	ND	2.0	
cis-1,2-Dichloroethene	0.17	ND	2.0	
2-Butanone	0.90	ND	10	
Bromochloromethane	0.25	ND	5.0	
Chloroform	0.14	ND	2.0	
1,1,1-Trichloroethane	0.14	ND	2.0	
1,1-Dichloropropene	0.18	ND	2.0	
Carbon tetrachloride	0.18	ND	2.0	
Benzene	0.12	ND	1.0	
1,2-Dichloroethane	0.18	ND	1.0	
Trichloroethene	0.10	ND	1.0	
1,2-Dichloropropane	0.17	ND	2.0	
Dibromomethane	0.18	ND	2.0	
Bromodichloromethane	0.17	ND	1.0	
cis-1,3-Dichloropropene	0.13	ND	2.0	
4-methyl-2-pentanone	0.85	ND	10	
Toluene	0.14	ND	2.0	
trans-1,3-Dichloropropene	0.19	ND	2.0	

Comments:	

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1221W01
Lab Sample ID: M1221W01	
1 '4' 1 C 1"1 4' ID: 10/01/06MGM	

Initial Calibration ID: 12/21/06MSM

Analyte	MDL	Method Blank	RL	Q
1,1,2-Trichloroethane	0.22	ND	1.0	
Tetrachloroethene	0.22	ND	1.0	
1,3-Dichloropropane	0.11	ND	2.0	
2-Hexanone	0.58	ND	10	
Dibromochloromethane	0.15	ND	2.0	
1,2-Dibromoethane	0.15	ND	2.0	
Chlorobenzene	0.15	ND	1.0	
1,1,1,2-Tetrachloroethane	0.23	ND	5.0	
Ethylbenzene	0.15	ND	2.0	
Xylene (total)	0.14	ND	. 10	
Styrene	0.16	ND	2.0	
Bromoform	0.18	ND	5.0	
Isopropylbenzene	0.17	ND	2.0	
1,1,2,2-Tetrachloroethane	0.17	ND	1.0	
Bromobenzene	0.17	ND	5.0	
1,2,3-Trichloropropane	0.20	ND	10	
n-Propylbenzene	0.13	ND	2.0	
2-Chlorotoluene	0.16	ND	5.0	
1,3,5-Trimethylbenzene	0.15	ND	2.0	
4-Chlorotoluene	0.16	ND	5.0	
tert-Butylbenzene	0.18	ND	5.0	
1,2,4-Trimethylbenzene	0.13	ND	2.0	
sec-Butylbenzene	0.17	ND	5.0	
1,3-Dichlorobenzene	0.11	ND	1.0	
p-Isopropyltoluene	0.10	ND	2.0	
1,4-Dichlorobenzene	0.11	ND	1.0	
n-Butylbenzene	0.33	ND	5.0	L2
1,2-Dichlorobenzene	0.14	ND	1.0	
1,2-Dibromo-3-chloropropane	0.81	ND	5.0	
1,2,4-Trichlorobenzene	0.36	ND	5.0	
Hexachlorobutadiene	0.60	ND	1.0	L2
Naphthalene	0.29	ND	2.0	
1,2,3-Trichlorobenzene	0.37	ND	5.0	

Comments:	
Annual Control of the	L. A. C. C. C. C. C. C. C. C. C. C. C. C. C.

Analytical l	Method: SW8260	0	AAB #:D	00602091		
Lab Name:	Columbia Anal	ytical Services/Reddir	ng			
Concentrati	on Units (ug/L or	mg/kg): UG/L	Metho	od Blank ID: <u>M1221W</u>	701	
Lab Sample	ID: <u>M1221W0</u>	1				
Initial Calib	ration ID: <u>12/21</u>	/06MSM				
	Ana	lyte	MDL	Method Blank	RL	Q
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-		rogate	Recovery	Control Limits	Qualifier	1
	4-Bromofluorob		102	82-124		-
	Dibromofluoron Toluene-d8 - SS		99	84-127 80-117		-
						1
		T. 4	l Standard	Ovelifien		-
		Fluorobenzene	1 Standard	Qualifier		
		Chlorobenzene-d5				
		1,4-Dichlorobenzen	e-d4			
Comments:						
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Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	***************************************
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1222W01
Lab Sample ID: M1222W01	

Initial	Calibration	ID:	12/21/06MSM

Analyte	MDL	Method Blank	RL	Q
Dichlorodifluoromethane	0.36	ND	5.0	
Chloromethane	0.23	ND	5.0	
Vinyl chloride	0.22	ND	1.0	
Bromomethane	0.27	ND	1.0	
Chloroethane	0.20	ND	5.0	
Trichlorofluoromethane	0.14	ND	5.0	
1,1-Dichloroethene	0.19	ND	2.0	
Acetone	1.0	ND	20	
Carbon disulfide	0.11	ND	5.0	
Methylene chloride	0.15	ND	5.0	
Iodomethane	0.20	ND	10	
trans-1,2-Dichloroethene	0.16	ND	2.0	
Tert-butylmethylether	0.17	ND	1.0	
1,1-Dichloroethane	0.12	ND	2.0	
Vinyl acetate	0.84	ND	25	
2,2-Dichloropropane	0.33	ND	2.0	
cis-1,2-Dichloroethene	0.17	ND	2.0	
2-Butanone	0.90	ND.	10	
Bromochloromethane	0.25	ND	5.0	
Chloroform	0.14	ND	2.0	
1,1,1-Trichloroethane	0.14	ND	2.0	
1,1-Dichloropropene	0.18	ND	2.0	
Carbon tetrachloride	0.18	ND	2.0	
Benzene	0.12	ND	1.0	
1,2-Dichloroethane	0.18	ND	1.0	
Trichloroethene	0.10	ND	1.0	
1,2-Dichloropropane	0.17	ND	2.0	-1
Dibromomethane	0.18	ND	2.0	
Bromodichloromethane	0.17	ND	1.0	
cis-1,3-Dichloropropene	0.13	ND	2.0	
4-methyl-2-pentanone	0.85	ND	10	
Toluene	0.14	ND	2.0	
trans-1,3-Dichloropropene	0.19	ND	2.0	

Comments:		
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Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	Method Blank ID: M1222W01
Lab Sample ID: M1222W01	
Initial Calibration ID: 12/21/06MSM	

Analyte	MDL	Method Blank	RL	Q
1,1,2-Trichloroethane	0.22	ND	1.0	
Tetrachloroethene	0.22	ND	1.0	
1,3-Dichloropropane	0.11	ND	2.0	
2-Hexanone	0.58	ND	10	
Dibromochloromethane	0.15	ND	2.0	
1,2-Dibromoethane	0.15	ND	2.0	
Chlorobenzene	0.15	ND	1.0	
1,1,1,2-Tetrachloroethane	0.23	ND	5.0	***************************************
Ethylbenzene	0.15	ND	2.0	
Xylene (total)	0.14	ND	10	
Styrene	0.16	ND	2.0	
Bromoform	0.18	ND	5.0	*******
Isopropylbenzene	0.17	ND	2.0	
1,1,2,2-Tetrachloroethane	0.17	ND	1.0	
Bromobenzene	0.17	ND	5.0	
1,2,3-Trichloropropane	0.20	ND	10	
n-Propylbenzene	0.13	ND ND	2.0	
2-Chlorotoluene	0.16	ND	5.0	
1,3,5-Trimethylbenzene	0.15	ND	2.0	
4-Chlorotoluene	0.16	ND	5.0	
tert-Butylbenzene	0.18	ND	5.0	
1,2,4-Trimethylbenzene	0.13	ND	2.0	
sec-Butylbenzene	0.17	ND	5.0	
1,3-Dichlorobenzene	0.11	ND	1.0	
p-Isopropyltoluene	0.10	ND	2.0	·
1,4-Dichlorobenzene	0.11	ND	1.0	
n-Butylbenzene	0.33	ND	5.0	
1,2-Dichlorobenzene	0.14	ND	1.0	
1,2-Dibromo-3-chloropropane	0.81	ND	5.0	
1,2,4-Trichlorobenzene	0.36	ND	5.0	
Hexachlorobutadiene	0.60	ND	1.0	
Naphthalene	0.29	ND	2.0	
1,2,3-Trichlorobenzene	0.37	ND	5.0	

Comments:	
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AAB #: <u>D0602091</u>

Analytical Method: SW8260

Lab Name:	Columbia Analytical Services/Redd	ing				
oncentrati	on Units (ug/L or mg/kg): UG/L	M	ethod Bl	ank ID: <u>M1222</u>	W01	
ab Sample	ID: M1222W01					
	ration ID: 12/21/06MSM					
		MDL	Mo	thod Blank	RL	Q
	Analyte	MIDL	IVIE	illou blank	KL	V
	To be a superior of the superi				***************************************	Windstein 1975/
	Surrogate	Recovery		Control Limits	Qualifier	
	4-Bromofluorobenzene - SS  Dibromofluoromethane - SS	98		82-124 84-127		
	Toluene-d8 - SS	101		80-117		
	Intern	al Standard	***************************************	Qualifier		
	Fluorobenzene					
	Chlorobenzene-d5 1,4-Dichlorobenze					
	1,4-19101110100001120	IIC-G-				
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	and the state of t				<u> </u>	

Analytical Method: SW8260	AAB #: _D0602091	
Lab Name: Columbia Analytical Serv	vices/Redding	
LCS ID: M1221W01LCS	Concentration Units (ug/L or mg/kg): UG/L	
Date Extracted:	Date Analyzed: 12/21/06	

Initial Calibration ID: 12/21/06MSM

Analyte	Expected	Found	%R	Control Limits	· Q
Dichlorodifluoromethane	10.0	9.6	96	27-158	
Chloromethane	10.0	10.5	105	51-137	
Vinyl chloride	10.0	10.3	103	57-137	
Bromomethane	10.0	10.3	103	44-156	-
Chloroethane	10.0	10.2	102	60-140	
Trichlorofluoromethane	10.0	10.9	109	54-146	
1,1-Dichloroethene	10.0	10.7	107	70-130	
Acetone	50.0	53.7	107	55-137	
Carbon disulfide	10.0	9.8	98	50-127	
Methylene chloride	10.0	10.0	100	73-121	
Iodomethane	10.0	9.7	97	50-150	E4
trans-1,2-Dichloroethene	10.0	9.6	96	74-124	
Tert-butylmethylether	10.0	9.7	97	75-119	
1,1-Dichloroethane	10.0	10.0	100	78-121	
Vinyl acetate	10.0	9.9	99	52-129	E4
2,2-Dichloropropane	10.0	9.0	90	61-137	
cis-1,2-Dichloroethene	10.0	9.9	99	80-118	
2-Butanone	50.0	52.0	104	76-122	
Bromochloromethane	10.0	9.9	99	82-118	
Chloroform	10.0	9.7	97	73-125	
1,1,1-Trichloroethane	10.0	9.9	99	76-124	
1,1-Dichloropropene	10.0	9.7	97	80-119	
Carbon tetrachloride	10.0	9.6	96	68-135	
Benzene	10.0	10.2	102	81-119	
1,2-Dichloroethane	10.0	10.0	100	75-122	
Trichloroethene	10.0	9.9	99	79-118	
1,2-Dichloropropane	10.0	9.9	99	82-115	
Dibromomethane	10.0	10.0	100	84-116	
Bromodichloromethane	10.0	9.6	96	81-122	
cis-1,3-Dichloropropene	10.0	9.9	99	78-118	
4-methyl-2-pentanone	50.0	51.1	102	81-127	
Toluene	10.0	10.0	100	83-116	
trans-1,3-Dichloropropene	10.0	10.0	100	73-122	

Comments:	
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Analytical Method: SW8260	AAB #: <u>D0602091</u>	
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1221W01LCS	Concentration Units (ug/L or mg/kg): UG/L	
Date Extracted:	Date Analyzed: 12/21/06	

Initial Calibration ID: 12/21/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	10.3	103	83-120	
Tetrachloroethene	10.0	9.8	. 98	82-118	
1,3-Dichloropropane	10.0	10.4	104	82-119	
2-Hexanone	50.0	50.9	102	81-130	
Dibromochloromethane	10.0	9.8	98	79-124	
1,2-Dibromoethane	10.0	10.1	101	82-116	
Chlorobenzene	10.0	10.1	101	86-114	
1,1,1,2-Tetrachloroethane	10.0	9.7	97	79-122	
Ethylbenzene	10.0	10.1	101	86-116	
Xylene (total)	30.0	29.3	98	85-117	
Styrene	10.0	9.8	98	84-119	
Bromoform	10.0	9.4	94	71-133	
Isopropylbenzene	10.0	9.8	98	77-117	
1,1,2,2-Tetrachloroethane	10.0	11.4	114	80-117	
Bromobenzene	10.0	10.6	106	84-120	
1,2,3-Trichloropropane	10.0	11.1	111	81-122	
n-Propylbenzene	10.0	9.9	99	87-117	
2-Chlorotoluene	10.0	10.2	102	87-119	
1,3,5-Trimethylbenzene	10.0	10.2	102	83-120	
4-Chlorotoluene	10.0	10.3	103	86-118	
tert-Butylbenzene	10.0	9.2	92	82-122	
1,2,4-Trimethylbenzene	10.0	10.0	100	86-121	
sec-Butylbenzene	10.0	9.6	96	84-128	
1,3-Dichlorobenzene	10.0	10.2	102	85-119	
p-Isopropyltoluene	10.0	9.1	91	84-121	
1,4-Dichlorobenzene	10.0	10.1	101	84-118	
n-Butylbenzene	10.0	7.9	79	81-123	L2
1,2-Dichlorobenzene	10.0	10.2	102	85-117	
1,2-Dibromo-3-chloropropane	40.0	41.9	105	67-121	
1,2,4-Trichlorobenzene	10.0	7.8	78	69-128	
Hexachlorobutadiene	10.0	6.2	62	71-135	L2
Naphthalene	10.0	8.6	86	60-131	
1,2,3-Trichlorobenzene	10.0	7.9	79	69-130	

Comments:		
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Analytical Me	thod: SW82	60	AAI	3 #: <u>D</u> 06	02091		
Lab Name: Columbia Analytical Services/Redding							
LCS ID: M12				— (ug/L or n	ng/kg): _UG/L		
		Date Ana					
Initial Calibrat			, 20u. <u></u>	700	-		
Initial Calibrat	1011 1D. 12/2	1/001V151V1	T				1
	Analyte		Expected	Found	%R	Control Limits	Q
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	Sur	rogate	Recover	y	Control Limits	Qualifier	
	Bromofluorob		105		82-124		
	oromofluorom luene-d8 - SS		103		84-127 80-117		
10	iuene-us - 55		102		00-11/	A L. P. B. C. C. B. C. C. C. C. C. C. C. C. C. C. C. C. C.	
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		The state of the s	l Standard		Qualifier		
		Fluorobenzene Chlorobenzene-d5					
		1,4-Dichlorobenzen	e-d4				
	1,4-Diemorobenzene d4						
Comments:							
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Analytical Method: SW8260	AAB #:	
Lab Name: Columbia Analytical Serv	vices/Redding	
LCS ID: M1221W01LCSD	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/21/06	
Initial Calibration ID: 12/21/06MSM		

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	9.9	99	27-158	
Chloromethane	10.0	10.2	102	51-137	
Vinyl chloride	10.0	10.2	102	57-137	
Bromomethane	10.0	9.7	97	44-156	
Chloroethane	10.0	9.8	98	60-140	
Trichlorofluoromethane	10.0	10.6	106	54-146	
1,1-Dichloroethene	10.0	10.4	104	70-130	
Acetone	50.0	53.1	106	55-137	
Carbon disulfide	10.0	9.4	94	50-127	
Methylene chloride	10.0	9.6	96	73-121	
Iodomethane	10.0	9.4	94	50-150	E4
trans-1,2-Dichloroethene	10.0	9.5	95	74-124	
Tert-butylmethylether	10.0	9.5	95	75-119	
I,1-Dichloroethane	10.0	9.9	99	78-121	
Vinyl acetate	10.0	9.7	97	52-129	E4
2,2-Dichloropropane	10.0	8.7	87	61-137	
cis-1,2-Dichloroethene	10.0	9.8	98	80-118	
2-Butanone	50.0	50.6	101	76-122	
Bromochloromethane	10.0	9.6	96	82-118	
Chloroform	10.0	9.7	97	73-125	
1,1,1-Trichloroethane	10.0	9.6	96	76-124	
1,1-Dichloropropene	10.0	9.9	99	80-119	
Carbon tetrachloride	10.0	9.6	96	68-135	
Benzene	10.0	10.1	101	81-119	
1,2-Dichloroethane	10.0	9.9	99	75-122	
Trichloroethene	10.0	9.8	98	79-118	
1,2-Dichloropropane	10.0	9.7	97	82-115	
Dibromomethane	10.0	9.7	97	84-116	
Bromodichloromethane	10.0	9.5	95	81-122	
cis-1,3-Dichloropropene	10.0	9.9	99	78-118	
4-methyl-2-pentanone	50.0	51.2	102	81-127	
Toluene	10.0	10.0	100	83-116	
trans-1,3-Dichloropropene	10.0	9.7	97	73-122	

Comments:	

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical S	ervices/Redding
LCS ID: M1221W01LCSD	Concentration Units (ug/L or mg/kg): UG/L
Date Extracted:	Date Analyzed: 12/21/06

Initial Calibration ID: 12/21/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	10.0	100	83-120	
Tetrachloroethene	10.0	9.6	96	82-118	5000
1,3-Dichloropropane	10.0	10.1	101	82-119	
2-Hexanone	50.0	50.4	101	81-130	
Dibromochloromethane	10.0	9.6	. 96	79-124	-
1,2-Dibromoethane	10.0	9.8	98	82-116	
Chlorobenzene	10.0	10.1	101	86-114	
1,1,1,2-Tetrachloroethane	10.0	9.6	96	79-122	
Ethylbenzene	10.0	10.1	101	86-116	
Xylene (total)	30.0	29.4	98	85-117	
Styrene	10.0	9.8	98	84-119	
Bromoform	10.0	9.4	94	71-133	
Isopropylbenzene	10.0	9.9	99	77-117	
1,1,2,2-Tetrachloroethane	10.0	11.0	110	80-117	
Bromobenzene	10.0	10.4	104	84-120	
1,2,3-Trichloropropane	10.0	10.5	105	81-122	
n-Propylbenzene	10.0	10.0	100	87-117	
2-Chlorotoluene	10.0	10.2	102	87-119	
1,3,5-Trimethylbenzene	10.0	9.7	97	83-120	
4-Chlorotoluene	10.0	10.2	102	86-118	
tert-Butylbenzene	10.0	10.8	108	82-122	
1,2,4-Trimethylbenzene	10.0	10.2	102	86-121	
sec-Butylbenzene	10.0	9.9	99	84-128	
1,3-Dichlorobenzene	10.0	10.1	101	85-119	
p-Isopropyltoluene	10.0	9.3	93	84-121	
1,4-Dichlorobenzene	10.0	9.9	. 99	84-118	
n-Butylbenzene	10.0	8.4	84	81-123	L2
1,2-Dichlorobenzene	10.0	10.0	100	85-117	,
1,2-Dibromo-3-chloropropane	40.0	39.0	98	67-121	
1,2,4-Trichlorobenzene	10.0	8.2	82	69-128	•
Hexachlorobutadiene	10.0	6.8	68	71-135	L2
Naphthalene	10.0	8.7	87	60-131	
1,2,3-Trichlorobenzene	10.0	8.0	80	69-130	

Comments:		

Analytica	l Method: SW82	60	AAE	#: <u>D060</u>	2091	· ·	
Lab Nam	e: Columbia An	alytical Services/Redo	ding				
LCS ID:	M1221W01LCSI	O Concer	ntration Units (	ug/L or ma	g/kg): <u>UG/L</u>		
Date Extr	acted:	Date Ana	alyzed: 12/21	/06			
	libration ID: 12/2						
	Analyte	2	Expected	Found	%R	Control Limits	Q
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	Sur	rogate	Recover	y C	Control Limits	Qualifier	
	4-Bromofluorob		106	-	82-124		
	Dibromofluoron Toluene-d8 - SS		101 101		84-127 80-117		
	Toluene-us - 55	·	101		80-117		
		Intown	ıl Standard		Qualifier		
		Fluorobenzene	ii Standard		Quamiei		
		Chlorobenzene-d5					
		1,4-Dichlorobenzer	ie-d4				
Comment	s:						

Analytical Method: SW8260	AAB #: <u>D0602091</u>	
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1222W01LCS	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/22/06	

Initial Calibration ID: 12/21/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	9.7	97	27-158	
Chloromethane	10.0	10.2	102	51-137	
Vinyl chloride	10.0	10.1	101	57-137	
Bromomethane	10.0	9.8	98	44-156	
Chloroethane	10.0	10.0	100	60-140	
Trichlorofluoromethane	10.0	10.1	101	54-146	
1,1-Dichloroethene	10.0	10.3	103	70-130	
Acetone	50.0	49.2	98	55-137	
Carbon disulfide	10.0	9.6	96	50-127	-
Methylene chloride	10.0	9.8	98	73-121	
Iodomethane	10.0	9.3	93	50-150	E4
trans-1,2-Dichloroethene	10.0	9.5	95	74-124	
Tert-butylmethylether	10.0	9.2	92	75-119	
1,1-Dichloroethane	10.0	9.5	95	78-121	
Vinyl acetate	10.0	9.2	92	52-129	E4
2,2-Dichloropropane	10.0	9.7	97	61-137	-
cis-1,2-Dichloroethene	10.0	9.5	95	80-118	
2-Butanone	50.0	48.2	96	76-122	
Bromochloromethane	10.0	9.2	92	82-118	
Chloroform	10.0	9.3	93	73-125	
1,1,1-Trichloroethane	10.0	9.5	95	76-124	
1,1-Dichloropropene	10.0	9.5	95	80-119	
Carbon tetrachloride	10.0	9.2	92	68-135	
Benzene	10.0	9.7	97	81-119	
1,2-Dichloroethane	10.0	9.4	94	75-122	
Trichloroethene	10.0	9.6	96	79-118	
1,2-Dichloropropane	10.0	9.2	92	82-115	
Dibromomethane	10.0	9.2	92	84-116	
Bromodichloromethane	10.0	9.0	90	81-122	
cis-1,3-Dichloropropene	10.0	9.3	93	78-118	
4-methyl-2-pentanone	50.0	48.1	96	81-127	
Toluene	10.0	9.8	98	83-116	
trans-1,3-Dichloropropene	10.0	9.4	94	73-122	

Comments:	

Analytical Method: SW8260	AAB #: <u>D0602091</u>	
Lab Name: Columbia Analytical Serv	vices/Redding	
LCS ID: M1222W01LCS	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/22/06	
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Initial Calibration ID: <u>12/21/06MSM</u>

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	9.4	94	83-120	
Tetrachloroethene	10.0	9.9	99	82-118	
1,3-Dichloropropane	10.0	9.6	96	82-119	
2-Hexanone	50.0	48.1	96	81-130	
Dibromochloromethane	10.0	9.1	91	79-124	
1,2-Dibromoethane	10.0	9.6	96	82-116	
Chlorobenzene	10.0	9.9	99	86-114	
1,1,1,2-Tetrachloroethane	10.0	9.2	92	79-122	
Ethylbenzene	10.0	10.0	100	86-116	
Xylene (total)	30.0	29.6	99	85-117	
Styrene	10.0	9.8	98	84-119	
Bromoform	10.0	9.2	92	71-133	
Isopropylbenzene	10.0	10.1	101	77-117	
1,1,2,2-Tetrachloroethane	10.0	10.2	102	80-117	
Bromobenzene	10.0	10.1	101	84-120	
1,2,3-Trichloropropane	10.0	10.0	100	81-122	
n-Propylbenzene	10.0	10.1	101	87-117	
2-Chlorotoluene	10.0	9.8	98	87-119	
1,3,5-Trimethylbenzene	10.0	10.4	104	83-120	
4-Chlorotoluene	10.0	10.0	100	86-118	
tert-Butylbenzene	10.0	11.0	110	82-122	
1,2,4-Trimethylbenzene	10.0	10.4	104	86-121	
sec-Butylbenzene	10.0	10.4	104	84-128	
1,3-Dichlorobenzene	10.0	10.1	101	85-119	
p-Isopropyltoluene	10.0	9.8	98	84-121	
1,4-Dichlorobenzene	10.0	9.8	98	84-118	
n-Butylbenzene	10.0	9.4	94	81-123	
1,2-Dichlorobenzene	10.0	9.9	99	85-117	
1,2-Dibromo-3-chloropropane	40.0	37.3	93	67-121	
1,2,4-Trichlorobenzene	10.0	9.0	90	69-128	
Hexachlorobutadiene	10.0	9.0	90	71-135	
Naphthalene	10.0	9.6	96	60-131	
1,2,3-Trichlorobenzene	10.0	8.7	87	69-130	

Comments:		

Analytica	l Method: SW82	60	AAF	3 #: <u>D06</u>	0209	01	<del>-</del> '.			
Lab Name: _Columbia Analytical Services/Redding										
LCS ID:	LCS ID: M1222W01LCS Concentration Units (ug/L or mg/kg): UG/L									
Date Extr	acted:	Date An	alyzed: <u>12/22</u>	/06		_				
	libration ID: 12/2			-						
	Analyt	e	Expected	Found	ı	%R	Control Limits	Q		
					-		2002			
	-									
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<u> </u>			L							
		rogate	Recover	y	Con	trol Limits	Qualifier			
	4-Bromofluorob		103			82-124				
	Dibromofluoror Toluene-d8 - SS		100			84-127 80-117				
	Toluelle-do - 33		100			80-117				
-			1.64		T	0 115				
		Fluorobenzene	al Standard			Qualifier				
		Chlorobenzene-d5			<del> </del>					
		1,4-Dichlorobenzer	ne-d4							
Comment	s:									
				MANAGEMENT TO T						

Analytical Method: SW8260	AAB #: _D0602091	
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1222W01LCSD	Concentration Units (ug/L or mg/kg):	UG/L
Date Extracted:	Date Analyzed: 12/22/06	
I-14-1 C-11		

Initial Calibration ID: 12/21/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
Dichlorodifluoromethane	10.0	9.9	99	27-158	
Chloromethane	10.0	10.5	105	51-137	
Vinyl chloride	10.0	10.3	103	57-137	
Bromomethane	10.0	9.8	98	44-156	
Chloroethane	10.0	10.2	102	60-140	
Trichlorofluoromethane	10.0	10.5	105	54-146	
1,1-Dichloroethene	10.0	10.4	104	70-130	
Acetone	50.0	53.1	106	55-137	
Carbon disulfide	10.0	9.5	95	50-127	
Methylene chloride	10.0	9.8	98	73-121	
lodomethane	10.0	9.4	94	50-150	E4
trans-1,2-Dichloroethene	10.0	9.3	93	74-124	
Tert-butylmethylether	10.0	9.7	97	75-119	
1,1-Dichloroethane	10.0	10.0	100	78-121	
Vinyl acetate	10.0	10.1	101	52-129	E4
2,2-Dichloropropane	10.0	9.6	96	61-137	
cis-1,2-Dichloroethene	10.0	9.7	. 97	80-118	
2-Butanone	50.0	50.2	100	76-122	
Bromochloromethane	10.0	9.6	96	82-118	
Chloroform	10.0	9.5	95	73-125	
1,1,1-Trichloroethane	10.0	9.8	98	76-124	-
1,1-Dichloropropene	10.0	9.9	99	80-119	
Carbon tetrachloride	10.0	9.5	95	68-135	
Benzene	10.0	10.1	101	81-119	
1,2-Dichloroethane	10.0	10.0	100	75-122	
Trichloroethene	10.0	9.9	99	79-118	
1,2-Dichloropropane	10.0	9.6	96	82-115	
Dibromomethane	10.0	9.9	99	84-116	
Bromodichloromethane	10.0	9.6	96	81-122	
cis-1,3-Dichloropropene	10.0	9.8	98	78-118	
4-methyl-2-pentanone	50.0	50.2	100	81-127	
Toluene	10.0	9.8	98	83-116	
trans-1,3-Dichloropropene	10.0	9.7	97	73-122	

Comments:	

Analytical Method: SW8260	AAB #: _D0602091	
Lab Name: Columbia Analytical Ser	vices/Redding	
LCS ID: M1222W01LCSD	Concentration Units (ug/L or mg/kg): UG/L	
Date Extracted:	Date Analyzed: 12/22/06	

Initial Calibration ID: 12/21/06MSM

Analyte	Expected	Found	%R	Control Limits	Q
1,1,2-Trichloroethane	10.0	9.8	. 98	83-120	
Tetrachloroethene	10.0	9.7	97	82-118	
1,3-Dichloropropane	10.0	10.0	100	82-119	
2-Hexanone	50.0	49.2	98	81-130	-
Dibromochloromethane	10.0	9.5	95	79-124	
1,2-Dibromoethane	10.0	9.8	98	82-116	
Chlorobenzene	10.0	10.0	100	86-114	
1,1,1,2-Tetrachloroethane	10.0	9.3	93	79-122	
Ethylbenzene	10.0	10.1	101	86-116	
Xylene (total)	30.0	29.9	100	85-117	
Styrene	10.0	10.1	101	84-119	
Bromoform	10.0	9.3	93	71-133	
Isopropylbenzene	10.0	10.2	102	77-117	
1,1,2,2-Tetrachloroethane	10.0	10.0	100	80-117	
Bromobenzene	10.0	10.1	101	84-120	
1,2,3-Trichloropropane	10.0	10.2	102	81-122	
n-Propylbenzene	10.0	10.0	100	87-117	
2-Chlorotoluene	10.0	9.9	99	87-119	
1,3,5-Trimethylbenzene	10.0	10.2	102	83-120	
4-Chlorotoluene	10.0	10.3	103	86-118	
tert-Butylbenzene	10.0	9.5	95	82-122	
1,2,4-Trimethylbenzene	10.0	10.3	103	86-121	
sec-Butylbenzene	10.0	10.4	104	84-128	
1,3-Dichlorobenzene	10.0	10.2	102	85-119	
p-Isopropyltoluene	10.0	9.8	98	84-121	
1,4-Dichlorobenzene	10.0	10.0	100	84-118	
n-Butylbenzene	10.0	9.4	94	81-123	
1,2-Dichlorobenzene	10.0	10.1	101	85-117	
1,2-Dibromo-3-chloropropane	40.0	37.7	94	67-121	
1,2,4-Trichlorobenzene	10.0	9.4	94	69-128	
Hexachlorobutadiene	10.0	8.8	88	71-135	
Naphthalene	10.0	9.8	98	60-131	
1,2,3-Trichlorobenzene	10.0	9.1	91	69-130	

Comments:		

Analytica	al Method: SW82	60	AAE	8#: <u>D06</u>	02091	_	
Lab Nam	e: <u>Columbia An</u>	alytical Services/R	edding				
LCS ID:	M1222W01LCS	D Con	centration Units (	ug/L or n	ng/kg): <u>UG/L</u>		
Date Extr	acted:	Date	Analyzed: <u>12/22</u>	/06			
	libration ID: 12/2				· ·		
	Analyte		Expected	Found	%R	Control Limits	Q
	1 inity to		Lapected	Tound	, , , , ,	Control Limits	
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		rrogate	Recovery	y   '	Control Limits	Qualifier	
	4-Bromofluorob Dibromofluoror		100		82-124 84-127		:
	Toluene-d8 - SS		100		80-117		
		Inter	rnal Standard		Qualifier	]	
		Fluorobenzene					
		Chlorobenzene-c					
		1,4-Dichloroben	zene-d4				
Comment	S:						·

Analytical Method: SW8260	AAB #:D0602091
Lab Name: Columbia Analytical Services/Redding	· .
Concentration Units (ug/L or mg/kg): UG/L	%Solids:
Parent Field Sample ID: M1221W01 BS ID	: M1221W01LCS BSD ID: M1221W01LCSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Dichlorodifluoromethane		10.0	9.6	96	9.9	99	3	20	27-158	
Chloromethane		10.0	10.5	105	10.2	102	3	20	51-137	
Vinyl chloride		10.0	10.3	103	10.2	102	1	20	57-137	
Bromomethane	·	10.0	10.3	103	9.7	97	6	20	44-156	
Chloroethane		10.0	10.2	102	9.8	98	4	20	60-140	
Trichlorofluoromethane		10.0	10.9	109	10.6	106	3	20	54-146	
1,1-Dichloroethene		10.0	10.7	107	10.4	104	3	20	70-130	
Acetone		50.0	53.7	107	53.1	106	1	20	55-137	
Carbon disulfide		10.0	9.8	98	9.4	94	4	20	50-127	
Methylene chloride		10.0	10.0	100	9.6	96	4	20	73-121	
Iodomethane		10.0	9.7	97	9.4	94	3	20	50-150	E4
trans-1,2-Dichloroethene		10.0	9.6	96	9.5	95	1	20	74-124	
Tert-butylmethylether		10.0	9.7	97	9.5	95	2	20	75-119	
1,1-Dichloroethane		10.0	10.0	100	9.9	99	1	20	78-121	
Vinyl acetate		10.0	9.9	99	9.7	97	2	20	52-129	E4
2,2-Dichloropropane		10.0	9.0	90	8.7	87	3	20	61-137	
cis-1,2-Dichloroethene	·	10.0	9.9	99	9.8	98	1	20	80-118	
2-Butanone		50.0	52.0	104	50.6	101	3	20	76-122	
Bromochloromethane		10.0	9.9	99	9.6	96	3	20	82-118	
Chloroform		10.0	9.7	97	9.7	97	0	20	73-125	
1,1,1-Trichloroethane		10.0	9.9	99	9.6	96	3	20	76-124	
1,1-Dichloropropene		10.0	9.7	97	9.9	99	2	20	80-119	
Carbon tetrachloride		10.0	9.6	96	9.6	96	0	20	68-135	
Benzene		10.0	10.2	102	10.1	101	1	20	81-119	
1,2-Dichloroethane		10.0	10.0	100	9.9	.99	1	20	75-122	
Trichloroethene		10.0	9.9	99	9.8	98	1	20	79-118	

Comments:			
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Analytical Method: SW8260		AAB#: <u>D060209</u>			
Lab Name: Columbia Analytical Services/Reddi	ng	·			
Concentration Units (ug/L or mg/kg): UG/L		_	%Solids:		
Parent Field Sample ID: M1221W01	BS ID:	M1221W01LCS	BSD ID:	M1221W0	1LCSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
1,2-Dichloropropane		10.0	9.9	99	9.7	97	2	20	82-115	
Dibromomethane		10.0	10.0	100	9.7	97	3	20	84-116	
Bromodichloromethane		10.0	9.6	96	9.5	95	1	20	81-122	
cis-1,3-Dichloropropene		10.0	9.9	99	9.9	99	0	20	78-118	
4-methyl-2-pentanone		50.0	51.1	102	51.2	102	0	20	81-127	. '
Toluene		10.0	10.0	100	10.0	100	0	20	83-116	
trans-1,3-Dichloropropene		10.0	10.0	100	9.7	97	3	20	73-122	
1,1,2-Trichloroethane		10.0	10.3	103	10.0	100	3	20	83-120	
Tetrachloroethene		10.0	9.8	98	9.6	96	2	20	82-118	
1,3-Dichloropropane		10.0	10.4	104	10.1	101	3	20	82-119	
2-Hexanone		50.0	50.9	102	50.4	101	1	20	81-130	
Dibromochloromethane		10.0	9.8	98	9.6	96	2	20	79-124	
1,2-Dibromoethane		10.0	10.1	101	9.8	98	3	20	82-116	
Chlorobenzene		10.0	10.1	101	10.1	101	0	20	86-114	
1,1,1,2-Tetrachloroethane		10.0	· 9.7	97	9.6	96	1	20	79-122	
Ethylbenzene		10.0	10.1	101	10.1	101	0	20	86-116	:
Xylene (total)		30.0	29.3	98	29.4	98	0	20	85-117	
Styrene		10.0	9.8	98	9.8	98	0	20	84-119	
Bromoform		10.0	9.4	94	9.4	94	0	20	71-133	
Isopropylbenzene		10.0	9.8	98	9.9	99	1	20	77-117	
1,1,2,2-Tetrachloroethane		10.0	11.4	114	11.0	110	4	20	80-117	, , , , , , , , , , , , , , , , , , , ,
Bromobenzene		10.0	10.6	106	10.4	104	2	20	84-120	
1,2,3-Trichloropropane		10.0	11.1	111	10.5	105	6	20	81-122	
n-Propylbenzene		10.0	9.9	99	10.0	100	1	20	87-117	
2-Chlorotoluene		10.0	10.2	102	10.2	102	0	20	87-119	
1,3,5-Trimethylbenzene		10.0	10.2	102	9.7	97	5	20	83-120	

Comments:	

Analytical Method: SW826	0		. 1	AAB #:	D060209	1				
Lab Name: Columbia Anal	lytical Serv	vices/Redd	ling							
Concentration Units (ug/L or	mg/kg):	UG/L				%Soli	ds:			
Parent Field Sample ID: M1	221W01	-	BS ID:	M1221	W01LCS	···-	BSD II	D: <u>M1221</u>	IW01LCSI	<u>)                                    </u>
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Chlorotoluene		10.0	10.3	103	10.2	102	1	20	86-118	
rt-Butylbenzene		10.0	9.2	92	10.8	108	16	20	82-122	
2,4-Trimethylbenzene		10.0	10.0	100	10.2	102	· 2	20	86-121	
c-Butylbenzene		10.0	9.6	96	9.9	99	3	20	84-128	
3-Dichlorobenzene		10.0	10.2	102	10.1	101	1	20	85-119	
Isopropyltoluene		10.0	9.1	91	9.3	93	2	20	84-121	
4-Dichlorobenzene		10.0	10.1	101	9.9	99	2	20	84-118	
Butylbenzene		10.0	7.9	79	8.4	84	6	20	81-123	L2
2-Dichlorobenzene		10.0	10.2	102	10.0	100	2	20	85-117	
2-Dibromo-3-chloropropane		40.0	41.9	105	39.0	98	7	20	67-121	
2,4-Trichlorobenzene		10.0	7.8	78	8.2	82	5	20	69-128	
exachlorobutadiene		10.0	6.2	62	6.8	68	9	20	71-135	L2
phthalene		10.0	8.6	86	8.7	- 87	1	20	60-131	
2,3-Trichlorobenzene		10.0	7.9	79	8.0	80	1	20	69-130	
										****
Comments:										

Analytical Method: SW8260	AAB #:D0602091
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	%Solids:
Parent Field Sample ID: M1222W01 BS I	D: M1222W01LCS BSD ID: M1222W01LCSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Dichlorodifluoromethane		10.0	9.7	97	9.9	99	2	20	27-158	
Chloromethane		10.0	10.2	102	10.5	105	3	20	51-137	
Vinyl chloride		10.0	10.1	101	10.3	103	2	20	57-137	
Bromomethane		10.0	9.8	98	9.8	98	0	20	44-156	
Chloroethane		10.0	10.0	100	10.2	102	2	20	60-140	
Trichlorofluoromethane		10.0	10.1	101	10.5	105	4	20	54-146	
1,1-Dichloroethene		10.0	10.3	103	10.4	104	1	20	70-130	
Acetone		50.0	49.2	98	53.1	106	8	20	55-137	
Carbon disulfide		10.0	9.6	96	9.5	95	1	20	50-127	
Methylene chloride		10.0	9.8	98	9.8	98	. 0	20	73-121	
lodomethane		10.0	9.3	93	9.4	94	1	20	50-150	<b>E</b> 4
trans-1,2-Dichloroethene		10.0	9.5	95	9.3	93	2	20	74-124	
Tert-butylmethylether		10.0	9.2	92	9.7	97	5	20	75-119	
1,1-Dichloroethane		10.0	9.5	95	10.0	100	5	20	78-121	
Vinyl acetate		10.0	9.2	92	10.1	101	9	20	52-129	<b>E4</b>
2,2-Dichloropropane		10.0	9.7	97	9.6	96	1	20	61-137	
cis-1,2-Dichloroethene		10.0	9.5	95	9.7	97	2	20	80-118	
2-Butanone		50.0	48.2	96	50.2	100	4	20	76-122	
Bromochloromethane		10.0	9.2	92	9.6	96	4	20 -	82-118	
Chloroform		10.0	9.3	93	9.5	95	2	20	73-125	
1,1,1-Trichloroethane		10.0	9.5	95	9.8	98	3	20	76-124	
1,1-Dichloropropene		10.0	9.5	95	9.9	99	4	20	80-119	
Carbon tetrachloride		10.0	9.2	92	9.5	. 95	3	20	68-135	
Benzene		10.0	9.7	97	10.1	. 101	4	20	81-119	-
1,2-Dichloroethane		10.0	9.4	94	10.0	100	. 6	20	75-122	
Trichloroethene		10.0	9.6	96	9.9	99	3	20	79-118	

Comments:	

Analytical Method: SW8260	AAB #: <u>D0602091</u>
Lab Name: Columbia Analytical Services/Redding	
Concentration Units (ug/L or mg/kg): UG/L	%Solids:
Parent Field Sample ID: M1222W01 BS ID:	M1222W01LCS BSD ID: M1222W01LCSD

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	· Q
1,2-Dichloropropane		10.0	9.2	92	9.6	96	4	20	82-115	
Dibromomethane		10.0	9.2	92	9.9	99	7	20	84-116	
Bromodichloromethane		10.0	9.0	90	9.6	96	6	20	81-122	
cis-1,3-Dichloropropene		10.0	9.3	93	9.8	98	5	20	78-118	
4-methyl-2-pentanone		50.0	48.1	96	50.2	100	4	- 20	81-127	
Toluene		10.0	9.8	98	9.8	98	0	20	83-116	
trans-1,3-Dichloropropene		10.0	9.4	94	9.7	97	3	20	73-122	
1,1,2-Trichloroethane		10.0	9.4	94	9.8	98	4	20	83-120	
Tetrachloroethene		10.0	9.9	99	9.7	97	2	20	82-118	
1,3-Dichloropropane		10.0	9.6	96	10.0	100	4	20	82-119	
2-Hexanone		50.0	48.1	96	49.2	98	2	20	81-130	
Dibromochloromethane		10.0	9.1	91	9.5	95	4	20	79-124	
1,2-Dibromoethane		10.0	9.6	96	9.8	98	2	20	82-116	
Chlorobenzene		10.0	9.9	99	10.0	100	1	20	86-114	
1,1,1,2-Tetrachloroethane		10.0	9.2	92	9.3	93	1	20	79-122	
Ethylbenzene		10.0	10.0	100	10.1	101	1	20	86-116	-
Xylene (total)		30.0	29.6	99	29.9	100	1	20	85-117	
Styrene		10.0	9.8	98	10.1	101	3	20	84-119	
Bromoform		10.0	9.2	92	9.3	93	1	20	71-133	
Isopropylbenzene		10.0	10.1	101	10.2	102	1	20	77-117	
1,1,2,2-Tetrachloroethane		10.0	10.2	102	10.0	100	2	20	80-117	
Bromobenzene		10.0	10.1	101	10.1	101	0	20	84-120	
1,2,3-Trichloropropane		10.0	10.0	100	10.2	102	2	20	81-122	
n-Propylbenzene		- 10.0	10.1	101	10.0	100	1	20	87-117	
2-Chlorotoluene		10.0	9.8	98	9.9	99	1 ·	20	87-119	
1,3,5-Trimethylbenzene		10.0	10.4	104	10.2	102	2	20	83-120	

Comments:		

Analytical Method: SW826	0		1	AAB #: .	D060209	1	***			
Lab Name: Columbia Ana	lytical Serv	vices/Redo	ling							
Concentration Units (ug/L or	mg/kg):	UG/L				%Soli	ds:			
Parent Field Sample ID: M1	222W01	<u> </u>	BS ID:	M1222	W01LCS	<u>_</u>	BSD II	D: <u>M1222</u>	W01LCSI	<u> </u>
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Chlorotoluene		10.0	10.0	100	10.3	103	3	20	86-118	
t-Butylbenzene		10.0	11.0	110	9.5	95	15	20	82-122	
,4-Trimethylbenzene		10.0	10.4	104	10.3	103	1	20	86-121	
-Butylbenzene		10.0	10.4	104	10.4	104	0	20	84-128	
-Dichlorobenzene		10.0	10.1	101	10.2	102	1	20	85-119	
sopropyltoluene		10.0	9.8	98	9.8	98	0	20	84-121	
-Dichlorobenzene		10.0	9.8	98	10.0	100	2	20	84-118	
Butylbenzene		10.0	9.4	94	9.4	94	0	20	81-123	
-Dichlorobenzene		10.0	9.9	. 99	10.1	101	2	20	85-117	
-Dibromo-3-chloropropane		40.0	37.3	93	37.7	94	1	20	67-121	
,4-Trichlorobenzene		10.0	9.0	90	9.4	94	4	20	69-128	
xachlorobutadiene		10.0	9.0	90	8.8	88	. 2	20	71-135	
phthalene		10.0	9.6	96	9.8	98	2	20	60-131	
,3-Trichlorobenzene		10.0	8.7	87	9.1	91	4	. 20	69-130	
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# ORGANIC ANALYSES DATA SHEET 8 MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY

Analytical Method: SW8260		AAB #: <u>D0602091</u>					
Lab Name: Columbia Analytical Services/Redo	ling						
Concentration Units (ug/L or mg/kg): UG/L %Solids:							
Parent Field Sample ID: ASE-51A-6D2	MS ID:	ASE-51A-6D2MS	MSD ID: ASE-51A-6D2MSD				

Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
Dichlorodifluoromethane		10.0	9.5	95	9.9	99	4	20	27-158	
Chloromethane		10.0	10.6	106	10.7	107	1	- 20	51-137	
Vinyl chloride	0.89	10.0	10.9	100	10.9	100	0	20	57-137	
Bromomethane		10.0	10.3	103	9.7	97	6	20	44-156	
Chloroethane	3.7	10.0	13.6	99	13.5	98	1	20	60-140	
Trichlorofluoromethane	-	10.0	9.6	96	9.9	99	3	20	5 <b>4</b> -146	
1,1-Dichloroethene	1.0	10.0	11.3	103	11.6	106	3	20	70-130	
Acetone	2.9	50.0	42.4	79	53.7	102	24	20	55-137	R5
Carbon disulfide		10.0	7.8	78	7.4	74	5	20	50-127	
Methylene chloride	0.33	. 10.0	9.7	94	9.7	94	0	20	73-121	
Iodomethane	0.22	10.0	9.5	93	9.2	90	3	20	50-150	E4
trans-1,2-Dichloroethene		10.0	9.3	93	9.3	93	0	20	74-124	
Tert-butylmethylether	65.7	10.0	76.3	106	79.1	134	4	20	75-119	М3
1,1-Dichloroethane	15.5	10.0	25.5	100	25.4	99	0	20	78-121	
Vinyl acetate		10.0	7.8	78	7.9	79	1	20	52-129	E4
2,2-Dichloropropane		10.0	7.6	76	7.5	75	1	20	61-137	
cis-1,2-Dichloroethene	1.8	10.0	11.2	94	11.3	95	1	20	80-118	
2-Butanone		50.0	46.1	92	52.6	105	13	20	76-122	
Bromochloromethane		10.0	9.1	91	9.4	94	3	20	82-118	
Chloroform	0.29	10.0	9.6	93	9.4	91	2	20	73-125	-
1,1,1-Trichloroethane		10.0	9.3	93	9.4	94	1	20	76-124	
1,1-Dichloropropene		10.0	9.6	. 96	9.8	98	2	20	80-119	
Carbon tetrachloride		10.0	8.5	85 -	8.3	83	2	20	68-135	
Benzene	102	10.0	113	110	113	110	0	20	81-119	М3
1,2-Dichloroethane		10.0	9.3	93	9.6	96	3	20	75-122	
Trichloroethene	4.9	10.0	14.5	96	14.2	93	2	20	79-118	

Comments:	

# ORGANIC ANALYSES DATA SHEET 8 MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY

Analytical Method: SW8260		AAB #: <u>D0602091</u>	· · · · · · · · · · · · · · · · · · ·	
Lab Name: Columbia Analytical Services/Re	dding			
Concentration Units (ug/L or mg/kg): UG/L		_	%Solids:	
Parent Field Sample ID: ASE-51A-6D2	MS ID:	ASE-51A-6D2MS	MSD ID: ASE-51A-6D2MSD	

Analyte S	Parent		Spiked		Duplicat		i i		l l	
•					1 1					
	Sample	Spike	Sample	%R	Spike	%R	%RPD	Control	Control	Q
I	Result	Added	Result		Sample			Limits	Limits	
				-	Result			%RPD	%R	
1,2-Dichloropropane	.	10.0	9.4	94	9.7	97	3	20	82-115	
Dibromomethane		10.0	9.0	90	9.2	92	2	20	84-116	
Bromodichloromethane		10.0	8.9	89	8.7	87	2	20	81-122	
cis-1,3-Dichloropropene		10.0	8.1	81	7.7	77	5	20	78-118	M2
4-methyl-2-pentanone		50.0	49.4	99	54.4	109	10	20	81-127	
Toluene	0.43	10.0	10.2	98	10.1	97	1	20	83-116	
trans-1,3-Dichloropropene		10.0	8.0	80	7.4	74	8	20	73-122	
1,1,2-Trichloroethane		10.0	9.4	94	9.5	95	1	20	83-120	
Tetrachloroethene	0.42	. 10.0	10.0	96	10.0	96	0	20	82-118	
1,3-Dichloropropane		10.0	9.4	94	9.7	97	3 .	20	82-119	
2-Hexanone		50.0	48.9	98	53.8	108	10	20	81-130	
Dibromochloromethane		10,0	7.7	77	7.6	76	1	20	79-124	M2
1,2-Dibromoethane		10.0	9.1	91	9.5	95	4	20	82-116	
Chlorobenzene		10.0	10.5	105	10.4	104	1	20	86-114	
1,1,1,2-Tetrachloroethane		10.0	8.8	88	8.3	83	6	20	79-122	
Ethylbenzene	92.9	10.0	96.4	35	96.6	37	0	20	86-116	M3
Xylene (total)	83.7	30.0	114	101	112	94	2	20	85-117	
Styrene		10.0	8.6	86	7.9	79	8	20	84-119	M2
Bromoform		10.0	7.0	70	7.0	70	0	20	71-133	M2
Isopropylbenzene	29.1	10.0	38.5	94	38.6	95	0	20	77-117	
1,1,2,2-Tetrachloroethane		10.0	9.8	98	10.5	105	7	20	80-117	
Bromobenzene		10.0	9.8	98	9.7	97	1	20	84-120	
1,2,3-Trichloropropane		10.0	10.0	100	11.0	110	10	20	81-122	
n-Propylbenzene	35.0	10.0	44.2	92	45.0	100	2 .	20	87-117	
2-Chlorotoluene		10.0	10.2	102	10.2	102	0	20	87-119	
1,3,5-Trimethylbenzene	15.6	10.0	25.3	97	24.1	85	5	20	83-120	

Comments:	

### ORGANIC ANALYSES DATA SHEET 8 MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY

Analytical Method: SW826				AAB#:	D060209	1				
Lab Name: Columbia Ana  Concentration Units (ug/L or		,	ling			%Soli	ids:			
Parent Field Sample ID: AS			MS ID:	ASE-5	1A-6D2MS		-		1A-6D2M	SD_
Analyte	Parent Sample Result	Spike Added	Spiked Sample Result	%R	Duplicat Spike Sample Result	%R	%RPD	Control Limits %RPD	Control Limits %R	Q
4-Chlorotoluene		10.0	9.8	98	10.0	100	2	20	86-118	
tert-Butylbenzene	1.2	10.0	10.2	90	10.5	93	3	20	82-122	
1,2,4-Trimethylbenzene	69.0	10.0	76.4	74	75.5	65	1	20	86-121	М3
sec-Butylbenzene	11.9	10.0	21.7	98	22.0	101	1	20	84-128	
1,3-Dichlorobenzene		10.0	10.1	101	10.0	100	1	20	85-119	
p-Isopropyltoluene	5.9	10.0	15.4	95	15:5	96	1	20	84-121	
1,4-Dichlorobenzene		10.0	10.0	100	10.0	100	0	20	84-118	
n-Butylbenzene		10.0	29.8	298	29.5	295	1	20	81-123	M1L2
1,2-Dichlorobenzene		10.0	10.1	101	10.2	102	1	20	85-117	
1,2-Dibromo-3-chloropropane		40.0	35.1	88	37.1	93	6	20	67-121	
1,2,4-Trichlorobenzene		10.0	9.1	91	10.1	101	10	20	69-128	
Hexachlorobutadiene		10.0	7.5	75	8.6	86	14	20	71-135	L2
Naphthalene	123	. 10.0	123	0	125	20	2	. 20	60-131	М3
1,2,3-Trichlorobenzene		10.0	8.7	87	9.8	98	12	20	69-130	
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### ORGANIC ANALYSES DATA SHEET 9 HOLDING TIMES

Analytical Met	hod: _SW8260	AAB#:	D0602091
Lab Name: C	Columbia Analytical Services/Redding		

		,		,			·					
			1st	Max.	lst	2nd	Max.	2nd		Max.	Time	Q
Field Sample ID	Date	Date	Date	Holding	Time	Date	Holding	Time	Date	Holding	Held	
	Collected	Received	Prepared	Time 1	Held	Prepared	Time 2	Held	Analyzed	Time A	Anal.	
TB-121506	12/15/06	12/16/06	N/A	N/A	N/A	N/A	N/A	N/A	12/21/06	14	6	
ASE-66A-6D2	12/15/06	12/16/06	N/A	N/A	N/A	N/A	N/A	N/A	12/21/06	14	6	
ASE-68A-6D2	12/15/06	12/16/06	N/A	N/A	N/A	N/A	N/A	N/A	12/21/06	14	6	
PL-507-6D2	12/15/06	12/16/06	N/A	N/A	N/A	N/A	N/A	N/A	12/21/06	14	6	
ASE-20A-6D2	12/15/06	12/16/06	N/A	N/A	N/A	N/A	N/A	N/A	12/21/06	. 14	6	
ASE-51A-6D2	12/15/06	12/16/06	N/A	N/A	N/A	N/A	N/A	N/A	12/22/06	14	7	
ASE-51A-6D2DL	12/15/06	12/16/06	N/A	N/A	N/A	N/A	N/A	N/A	12/22/06	14	7	
ASE-51A-6D2MS	12/15/06	12/16/06	N/A	N/A	N/A	N/A	N/A	N/A	12/22/06	14	7	
ASE-51A-6D2MSD	12/15/06	12/16/06	N/A	N/A	N/A	N/A	N/A	N/A	12/22/06	14	7	
ASE-53A-6D2	12/15/06	12/16/06	N/A	N/A	N/A	N/A	N/A	N/A	12/21/06	14	6	
ASE-52A-6D2	12/15/06	12/16/06	N/A	N/A	N/A	N/A	N/A	N/A	12/22/06	14	7	
ASE-52A-6D2DL	12/15/06	12/16/06	N/A	N/A	N/A	N/A	N/A	N/A	12/22/06	14	7	
ASE-65A-6D2	12/15/06	12/16/06	N/A	N/A	N/A	N/A	N/A	N/A	12/22/06	14	7	
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# ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: SW8260	AAB #: .	D0602091	
Lab Name: Columbia Analytical Services/Redding	***************************************		
Instrument ID #: MSM DB-624			

Field Sample ID/Std ID/ Blank ID/QC Sample ID	Laboratory File ID	Date Analysis Started	Time Analysis Started	Date Analysis Completed	Time Analysis Completed
VSTD00.5	M065649	12/21/06	1439	12/21/06	1459
VSTD001	M065650	12/21/06	1500	12/21/06	1520
VSTD005	M065651	12/21/06	1521	12/21/06	1541
VSTD010	M065652	12/21/06	1543	12/21/06	1603
VSTD020	M065653	12/21/06	1604	12/21/06	1624
VSTD100	M065655	12/21/06	1647	12/21/06	1707
VSTD150	M065656	12/21/06	1709	12/21/06	1729
VSTD050	M065658	12/21/06	1752	12/21/06	1812
QCALTSTD4	M065661	12/21/06	1856	12/21/06	1916
VSTD10M	M065665	12/21/06	2022	12/21/06	2042
M1221W01LCS	M065666	12/21/06	2043	12/21/06	2103
M1221W01LCSD	M065667	12/21/06	2105	12/21/06	2125
M1221W01	M065669	12/21/06	2148	12/21/06	2208
TB-121506	M065670	12/21/06	2209	12/21/06	2229
ASE-66A-6D2	M065671	12/21/06	2231	12/21/06	2251
ASE-68A-6D2	M065672	12/21/06	2252	12/21/06	2312
PL-507-6D2	M065673	12/21/06	2314	12/21/06	2334
ASE-20A-6D2	M065674	12/21/06	2335	12/21/06	2355
ASE-53A-6D2	M065675	12/21/06	2356	12/22/06	0016
ASE-52A-6D2	M065676	12/22/06	0018	12/22/06	0038
ASE-65A-6D2	M065677	12/22/06	0039	12/22/06	0059
ASE-51A-6D2	M065678	12/22/06	0101	12/22/06	0121
ASE-51A-6D2MS	M065679	12/22/06	0122	12/22/06	0142
ASE-51A-6D2MSD	M065680	12/22/06	. 0144	12/22/06	0204
VSTD10M	M065684	12/22/06	0952	12/22/06	1012
M1222W01LCS	M065685	12/22/06	1014	12/22/06	1034

Comments:			

# ORGANIC ANALYSES DATA SHEET 10 INSTRUMENT ANALYSIS SEQUENCE LOG

Analytical Method: SW826	50	AAB #:D06	602091	=	
Lab Name: Columbia Analy	ytical Services/Redding				
Instrument ID #: MSM	DB-624				
		·			
Field Sample ID/Std ID/	Laboratory	Date Analysis	Time Analysis	Date Analysis	Time Analysis
Blank ID/QC Sample ID	File ID	Started	Started	Completed	Completed
M1222W01LCSD	M065686	12/22/06	1035	12/22/06	1055
M1222W01	M065688	12/22/06	1118	12/22/06	1138
ASE-51A-6D2DL	M065689	12/22/06	1139	12/22/06	1159
ASE-52A-6D2DL	M065690	12/22/06	1201	12/22/06	1221
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### ORGANIC ANALYSES DATA SHEET APPENDIX A SURROGATE RESULTS

Analytical Method: SW8260	AAB #:
Lab Name: Columbia Analytical Services/Redding	
Matrix: Water	

Field/QC Sample ID	S1	S2	S3	S4	S5	S6	S7	S8	Q
M1221W01LCS	105	103	102				1		
M1221W01LCSD	. 106	. 101	101						
M1221W01	102	99	101						
TB-121506	101	101	102						
ASE-66A-6D2	101	103	102						
ASE-68A-6D2	102	101	100						
PL-507-6D2	103	99	100						
ASE-20A-6D2	101	97	99						
ASE-53A-6D2	101	100	100						
ASE-52A-6D2	103	99	99						
ASE-65A-6D2	102	98	102						
ASE-51A-6D2	101.	99	99						
ASE-51A-6D2MS	99	99	99						
ASE-51A-6D2MSD	101	98	99						
M1222W0ILCS	103	99	100						
M1222W01LCSD	100	99	100						
M1222W01	100	98	101						
ASE-51A-6D2DL	100	99	100						
ASE-52A-6D2DL	101	97	102						
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S1:	4-Bromofluorobenzene - SS	82-124
S2:	Dibromofluoromethane - SS	84-127
S3:	Toluene-d8 - SS	80-117

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### Soil Gas Helium Analyses for CH2M Hill

Performed by Dr. Richard L. Johnson 304 SW Hamilton Street Portland, Oregon 97239

#### Introduction

The text below describes soil gas samples that have been analyzed for helium concentration using gas chromatography (GC) with thermal conduction detection. The samples were collected by CH2M Hill in 0.8 liter stainless steel cans that had been evacuated prior to sampling. The GC analytical method used was sufficient to separate helium from all other common atmospheric constituents, including hydrogen<sup>1</sup>. All samples were collected by CH2M Hill in September and October 2006. They were then shipped by overnight courier to Portland, Oregon and were analyzed on the day they were received.

#### Sample Handling Procedure

Upon receipt, canisters were pressurized by injecting 1.0 liters of argon into each canister using a gas-tight syringe.

#### **Analysis Method**

At the time of analysis, a one-milliliter sample was taken from the canister to be analyzed and injected into a gas sampling valve with a 0.3 mL sample loop. With the GC oven at 30°C, the sample was injected onto a 15m long Carboxen 1010 PLOT column. The temperature was maintained at 30°C for 1.5 minutes until after the helium had eluted, and then raised to 200°C at 25 degrees per minute to remove all other soil gas components.

The GC was calibrated each day with four gas standards (0.02%, 0.1%, 1%, and 10% helium by volume). The standards were prepared by making the appropriate mixture in a one-liter Tedlar bag, then drawing the sample into an evacuated canister in much the same manner as the samples were taken in the field. Each of the canisters was then pressurized with 1.0 liters of argon. A linear calibration curve, passing through the origin, was generated from the standards and used for quantitation of helium in the samples. The calibration data are listed in Table II. The quantitation limit for the analysis was 0.02% helium by volume.

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<sup>&</sup>lt;sup>1</sup> We are unaware of any interferences with the helium analysis, and given the significant number of "non-detects" in the samples analyzed, we are confident that nothing interfered with these helium measurements. The objective of these analyses was to eliminate the interferences that occur when helium leak detectors are used in the field to detect helium in soil gas. Those interferences are primarily due to carbon dioxide and methane in soil gas. The GC method is known to eliminate those interferences.

#### Results

Table I lists the helium analyses for all of the samples received from CH2M Hill (reported as percent helium by volume of the received sample), along with sample time and date and analysis date. In all cases the chromatograms were examined to ensure that integration of the helium peaks was satisfactory and that there were no interferences.

### TABLE I.

SAMPLE	COLLECTION DATE:TIME	He (%V:V)	ANALYSIS DATE
P-16-M-WD06-0918	09/18:0907	0.04	09/19
P-23-U-WD06-0918	09/18:1047	0.05	09/19
P-37-WD06-0918	09/18:1254	< 0.02	09/19
P-38-WD06-0918	09/18:1342	< 0.02	09/19
P35-WD06-0918	09/18:1532	4.04	09/19
P-33-WD06-0919	09/19:1044	0.17	09/21
ASE-113A-WD06-0920	09/20:0258	0.39	09/21
P-25-M-WD06-0920	09/20:0530	< 0.02	09/21
BC-7A-WD06-0921	09/21:0918	<0.02	09/22
P-40-WD06-0921	09/21:1052	< 0.02	09/22
P-28-U-WD06-0921	09/21:1208	< 0.02	09/22
P-28-M-WD06-0921	09/21:1306	< 0.02	09/22
P-28-L-WD06-0921	09/21:1432	< 0.02	09/22
D-WD06-01-0921	09/21:0700	< 0.02	09/22
P-32-WD06-0922	09/22:1352	<0.02	09/26
P-46-U-WD06-092	09/22:0835	< 0.02	09/26
P-21-U-WD06-092	09/22:1249	< 0.02	09/26
PL-103A-WD06-0922	09/22:1159	0.08	09/26

TABLE I (Cont.)

SAMPLE	COLLECTION DATE:TIME	He (%V:V)	ANALYSIS DATE
P31-WD06-0925	09/25:1235	0.15	09/26
D-WD06-0925	09/25:1000	< 0.02	09/26
P-47-WD06-0925	09/25:1134	< 0.02	09/26
P-36-WD06-0925	09/25:1349	< 0.02	09/26
P-39-WD06-0925	09/25:1514	0.67	09/26
P-34-WD06-0925	09/25:1025	< 0.02	09/26
ASE-114A-WD06-0928	09/28:0217	23.4	09/29
ASE-69A-WD06-0927	09/27:0814	0.66	09/29
P-25-M-WD06-0928	09/28:0553	< 0.02	09/29
P-25-U-WD06-0928	09/28:0520	< 0.02	09/29
	00/00 0011	0.04	10/02
PL-105A-WD06-0929	09/29:0911	< 0.02	10/03
P-34-M-WD06-0929		< 0.02	10/03
P-17-U-WD06-0929	09/29:1139	< 0.02	10/03
DC 10 WD06 1006	10/06.0205	0.21	10/06
BC-18-MD00-1000	10/06:0205	0.31	10/06
P-14-U-WD06-1010	10/10:1000	<0.02	10/11
D-WD06-1010	10/10:1000	< 0.02	10/11
P-34-M-WD06-0929 P-17-U-WD06-0929 BC-18-WD06-1006 P-14-U-WD06-1010	09/29:1328 09/29:1139 10/06:0205 10/10:1000	<0.02 <0.02 0.31 <0.02	10/03 10/03 10/06

TABLE II. GC CALIBRATION DATA

DATE	He CONCENTRATION (%V:V)	PEAK AREA
09/19	0.02%	0.10
	0.10	0.66
	1.0	6.40
	10.0	69.90
09/21	0.02%	0.12
****	0.10	0.77
	1.0	7.54
	10.0	86.09
09/22	0.02%	0.12
	0.10	0.75
	1.0	7.46
	10.0	79.23
09/26	0.02%	0.12
	0.10	0.76
	1.0	6.74
	10.0	73.76
09/29	0.02%	0.09
	0.10	0.55
	1.0	5.08
	10.0	48.29

TABLE II. GC CALIBRATION DATA (Cont)

DATE	He CONCENTRATION (%V:V)	PEAK AREA
10/03	0.02%	0.09
	0.10	0.61
	1.0	6.11
	10.0	59.90
10/06	0.02%	0.10
	0.10	0.47
	1.0	4.88
	10.0	44.63
10/11	0.02%	0.18
	0.10	0.94
	1.0	9.70
	10.0	94.44

### Soil Gas Helium Analyses for CH2M Hill

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#### Introduction

The text below describes soil gas samples that have been analyzed for helium concentration using gas chromatography (GC) with thermal conduction detection. The samples were collected by CH2M Hill in 0.8 liter stainless steel cans that had been evacuated prior to sampling. The GC analytical method used was sufficient to separate helium from all other common atmospheric constituents, including hydrogen<sup>1</sup>. All samples were collected by CH2M Hill in November 2006. They were then shipped by overnight courier to Portland, Oregon and were analyzed on the day they were received.

#### **Sample Handling Procedure**

Upon receipt, canisters were pressurized by injecting 1.0 liters of argon into each canister using a gas-tight syringe.

#### **Analysis Method**

At the time of analysis, a one-milliliter sample was taken from the canister to be analyzed and injected into a gas sampling valve with a 0.3 mL sample loop. With the GC oven at 30°C, the sample was injected onto a 15m long Carboxen 1010 PLOT column. The temperature was maintained at 30°C for 1.5 minutes until after the helium had eluted, and then raised to 200°C at 25 degrees per minute to remove all other soil gas components.

The GC was calibrated each day with four gas standards (0.02%, 0.1%, 1%, and 10% helium by volume). The standards were prepared by making the appropriate mixture in a one-liter Tedlar bag, then drawing the sample into an evacuated canister in much the same manner as the samples were taken in the field. Each of the canisters was then pressurized with 1.0 liters of argon. A linear calibration curve, passing through the origin, was generated from the standards and used for quantitation of helium in the samples. The calibration data are listed in Table II. The quantitation limit for the analysis was 0.02% helium by volume.

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<sup>&</sup>lt;sup>1</sup> We are unaware of any interferences with the helium analysis, and given the significant number of "non-detects" in the samples analyzed, we are confident that nothing interfered with these helium measurements. The objective of these analyses was to eliminate the interferences that occur when helium leak detectors are used in the field to detect helium in soil gas. Those interferences are primarily due to carbon dioxide and methane in soil gas. The GC method is known to eliminate those interferences.

#### Results

Table I lists the helium analyses for all of the samples received from CH2M Hill (reported as percent helium by volume of the received sample), along with sample time and date and analysis date. In all cases the chromatograms were examined to ensure that integration of the helium peaks was satisfactory and that there were no interferences.

TABLE I.

	<u>COLLECTION</u>		
SAMPLE	DATE:TIME	He (%V:V)	ANALYSIS DATE
P-17-M-WD_111406	11/14/2006:1020	< 0.02	11/16
P-17-U-WD_111406	11/14/2006:1125	< 0.02	11/16
P-21-U-WD_111406	11/14/2006:1340	< 0.02	11/16
P-23-U-WD_111406	11/14/2006:1520	< 0.02	11/16
P-47-WD_111506	11/15/2006:0859	< 0.02	11/16
P-28-U-WD_111506	11/15/2006:1031	< 0.02	11/16
P-28-M-WD_111506	11/15/2006:1128	< 0.02	11/16
P-28-L-WD_111506	11/15/2006:1331	< 0.02	11/16

### TABLE II. GC CALIBRATION DATA

DATE	He CONCENTRATION (%V:V)	PEAKAREA
11/16	0.02%	0.12
	0.10	0.75
	1.0	6.70
	10.0	71.90